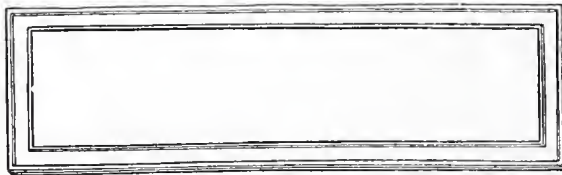
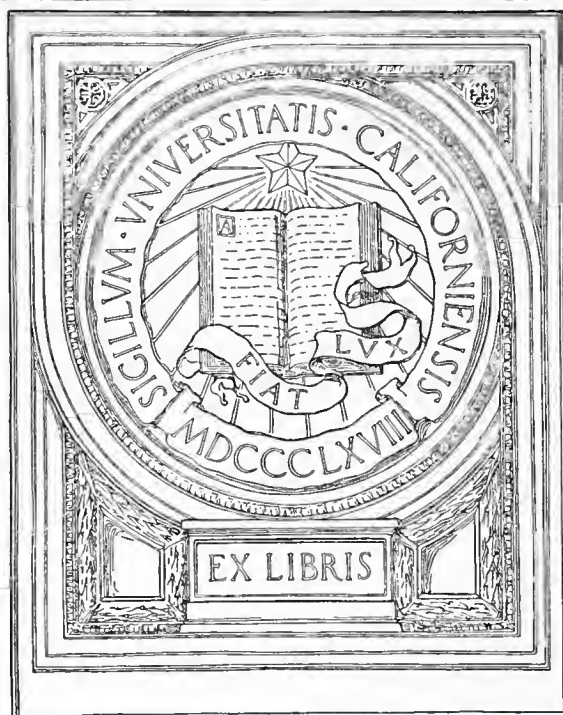
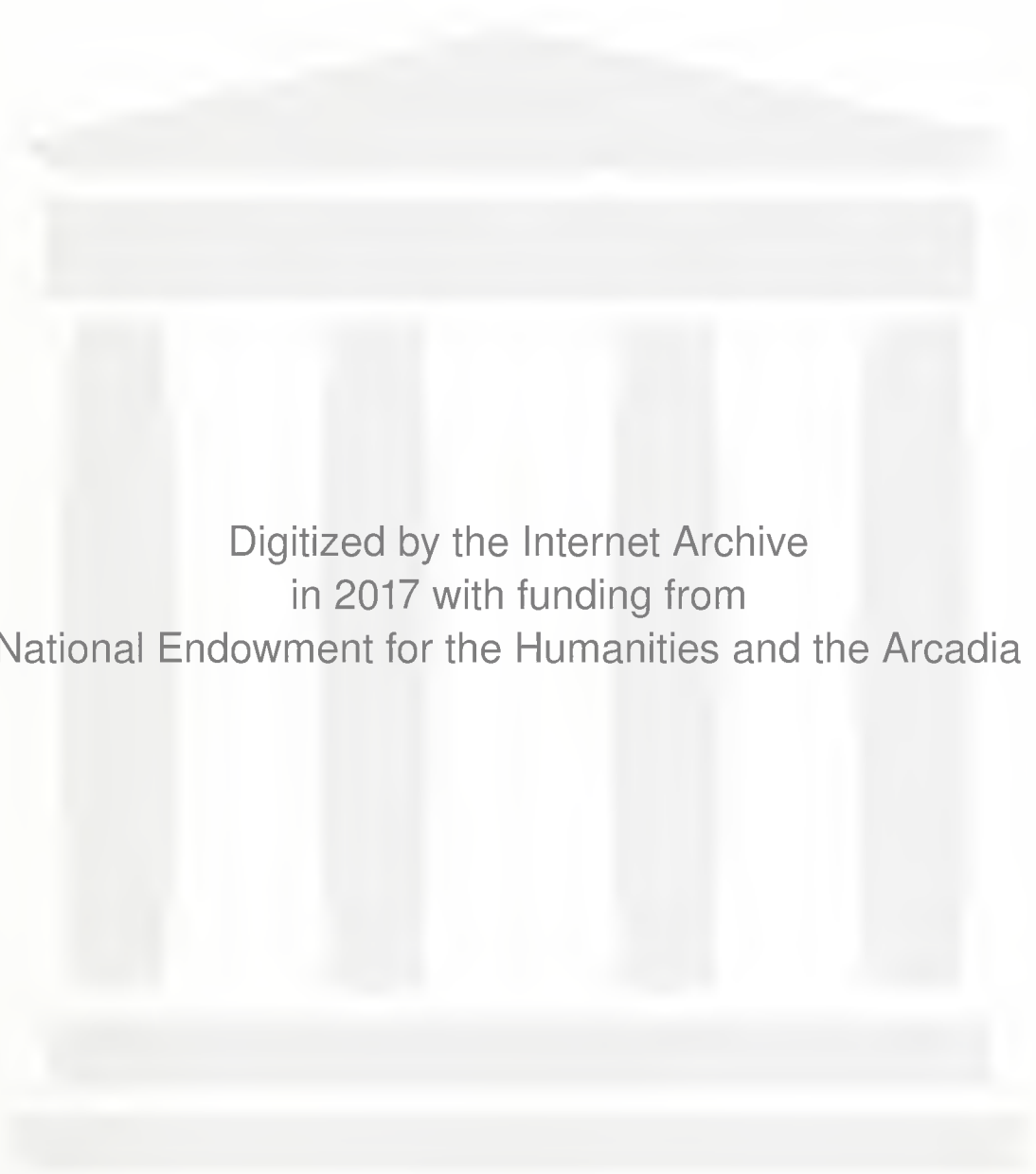


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THE JUNE, 1952 JOURNAL OF THE ARKANSAS MEDICAL SOCIETY

VOL. XLIX NO. 1

FORT SMITH, ARKANSAS

SECOND ARKANSAS RURAL HEALTH CONFERENCE, LITTLE ROCK, AUGUST 7th AND 8th

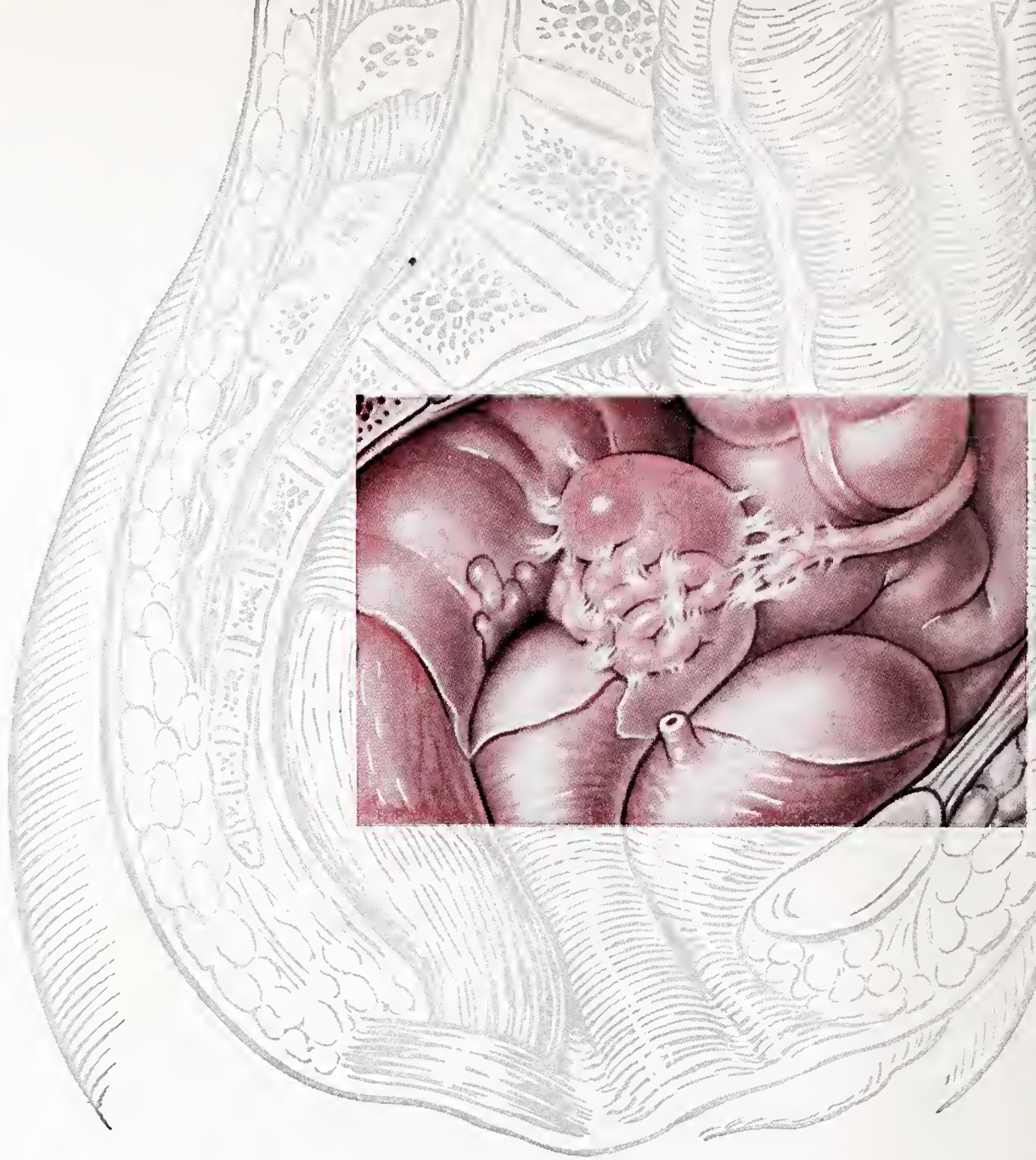
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1. Greene, G. G.: Kentucky M. J. 50:8, 1952.

2. Stevenson, C. S., et al.: Am. J. Obst. & Gynec. 61:498, 1951.



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THE *Journal* OF THE *Arkansas* *Medical Society*

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THE ARKANSAS MEDICAL SOCIETY
And Published Under Direction of the Council

W. R. BROOKSHER, M. D., Editor
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S. A. DRENNEN, M. D.
Stuttgart
President
Arkansas Medical Society
1952-1953

..... The JOURNAL

OF THE ARKANSAS MEDICAL SOCIETY

PUBLISHED MONTHLY UNDER DIRECTION OF THE COUNCIL

Vol. XLIX

FORT SMITH, ARKANSAS, JUNE, 1952

No. 1

PRESIDENT'S ADDRESS* (General Session Opening Address)

CHARLES R. HENRY, M. D.
Little Rock

In the past two years, first as president-elect and then as president of our state society, I have had the chance to see and to be part of the movement to improve relations between our profession and the public. Since I can speak best for myself, I want to review some of the activities that have entered into that movement and to point out the time and effort involved—not on my part alone, but on the part of other busy physicians—and to outline for you the limitations which have, in some instances, handicapped the movement. When I refer to my own activities, I hope you will understand that I do so not from vanity, but to show you the planning, travel and time-consumption involved in these activities.

Even before I was chosen as president-elect, I devoted weeks of study, travel and committee work to the establishment of the Blue Cross-Blue Shield program for Arkansas. These plans, as you know, were developed and activated principally to meet the hue and cry (sometimes justified, but nearly always trumpeted by agitators out of all proportion to the justice of the charge) against high medical costs. In some ways, these plans actually represent a planned budgeting operation which the individual patients are either unable or unwilling to plan for themselves. They put medical costs on an actuarial basis, and through the well-known "pool" principle involved in any insurance activity, divide the risk. So strictly, this activity was not a medical matter at all. It was a budgeting, savings, insurance activity—a business, rather a truly professional endeavor. Nothing in my medical training had equipped me to help in this work; I had to learn about actuarial tables, commission rulings, premium determinations and so forth from scratch. Plans in other states had to be studied and evaluated; the successes and mistakes of other plans had to be ferreted out and reviewed; insurance

company officials had to be conferred with, and most of these activities of necessity took me away from Little Rock and my own practice.

All of you know the vigorous fight our profession has had to carry on against socialized medicine. Every doctor has taken some part in it, but this activity—which is still going on, and which calls for constant alertness and quick action—puts a particularly demanding responsibility on society officers. Again, the doctor is called to function in a field, in nowise related to his training and his primary interests—this time on the political level. Of course it falls on each of us to carry a measure of political and citizenship responsibility, but that ordinary citizen role hardly equips us to function in the arena of practical politics. The very language of legislative bills is obscure to a non-legislator; it takes care and time to study proposed (or threatened) bills. Nearly three years ago, I joined 35 other doctors in Denver to plan and carry out an emergency pressure campaign to sidetrack and defeat Federal legislation which seriously threatened our existence as private practitioners. This one trip took six days out of my professional time; represented a real loss in income, and inconvenienced some of my patients. Don't misunderstand me—I was glad to represent Arkansas doctors at this important conference and to help in this vital effort. But at that meeting, I saw that other states were represented—or supplemented, at least—by laymen with no medical responsibilities, and that, in most cases, these laymen had more background, more data, a keener awareness of the issues and procedures involved, than did the physicians present. I don't mean that they were smarter than the doctors nor that they had a deeper interest in the issues. I do mean that they had obviously had the time to study the problems in greater detail, and had been able to organize their thinking about possible avenues of action because that was their only—or principal—business. These men were hired public relations men, and public relations made up their principal field of endeavor, just as you and I are principally dedicated to the treatment of sickness.

Now—to return to Arkansas—a year ago, the

*Presented before Seventy-sixth Annual Session, Arkansas Medical Society, Little Rock, April 21, 1952.

state society, in cooperation with other groups sponsored the first Arkansas Rural Health Conference. On the whole it was a most successful conference, and the society literally reaped a terrific crop of commendatory newspaper and radio space. Over a period of three days, the Little Rock and state papers featured, in column after column of front page space and in many, many pictures, the concern of Arkansas doctors for the health of Arkansas people. Editorially, the newspapers praised our profession—a welcome change from the editorial attacks we have suffered in so many sections. All this could not be bought by money—yet it was not simply a spontaneous reaction to our conference. Back of the gratifying newspaper coverage, back of the fine editorials, back of the radio interviews—behind all these was a careful preparation by the officials of the society to provide the papers and radio stations with advance information on what was to take place, what we hoped to accomplish and what the various speakers would say. This background "fill-in" wasn't done overnight. It took time and preparation—and again, it took, or stole time from practice and patients by the physicians involved. Again physicians, trained to take care of sick people, were engaged—willingly, to be sure—in an activity relatively foreign to their inclination and training.

After the Rural Health Conference, I asked Dr. Frank Kumpuris to head our public relations committee for the state society. He had already put much time (and considerable money of his own) into such activities for the Pulaski County Society. As you know, his ideas are presented in his committee report in the "State Journal of the Arkansas Medical Society" for March. Doctor Kumpuris has had first hand experience in the task of a physician trying to perform his medical duties and trying to combine this primary—this sworn—responsibility with an attempt to accomplish a full scale public relations program for all the physicians of Arkansas. I believe he will tell you, if you will ask him to speak in full truth, that **no man can do the two things together.**

In December of last year, it was my good fortune to participate in the AMA's fourth annual Public Relations Conference in Los Angeles. In that two-day meeting, the best thinking, both professional and lay, discussed substantially every aspect of public relations as it affects medicine. With each speaker, it became more and more obvious to me that not only are well-planned, well-guided public relations programs necessary at every level of organized medicine, but that the

field calls for special personnel, not tied down by operation schedules or limited by hospital rounds. The professional journalists, the full-time public relations men from both the national AMA offices and from various state and county societies—all these men showed, in speeches and in conference sessions, that they command a grasp of the problems involved and that they have both the talent and the time to devise measures and procedures to solve these problems . . . and the time and talents to carry them out once they are planned and approved.

One of the conference speeches was delivered by Dr. Ernest H. Dichter, well known psychologist. He had been employed, more than a year ago by the Alameda, California, County Medical Society to study the doctor-patient relationship in all its psychological angles, and to make recommendations which might lead to the lessening of patient (and doctor) resentments and misunderstandings in practice. While his psychological findings were very interesting, a statement he made about the general situation sticks in my mind most strongly. He said "Physicians must recognize that the world is changing, that medical practice is part of this world, and that the profession must use the best techniques to adapt practice to these changes." He, and other conference leaders, made it plain that this involved the use of every ethical aid to better public understanding, to the erasing of public resentment against the profession, and the widest possible dissemination of true and favorable information about the private practice of medicine through every respectable avenue available to us.

I join with Doctor Kumpuris in the belief that a physicians' committee should not be expected to do the actual work of tapping these avenues. He feels, and I feel, that the public relations program for the state Society, should be in charge of a professional director, trained in this field. We feel that such a man, familiar with the highly developed techniques of this field, should be employed, and that a budget adequate to enable him to operate successfully be set up by the state Society. With such a man in our employ, we could join most effectively with the AMA public relations staff to accomplish the principal objectives, which are:

1. To win strength for medicine by informing the general public of objectives, accomplishments and services.
2. To strengthen member support by getting information on these same points to all doctors in the state.
3. To improve physician-patient relationships.

4. To cement such improved relationships not only at the national, but at grass-roots level.

5. To work toward solving economic problems arising from the cost of illness . . . not only physicians' fees, but all costs of sickness.

6. To enlist the interest and the thinking of all physicians and particularly the young practitioners . . . not leaving all concerned in these matters in the hands of Society officers.

Other states and more than a hundred and fifty county societies, have found that professional help in this field pays big dividends in good will, improved relationships and efficiency. It is fine and fitting that state societies honor individuals with high offices in the societies, but in the increasing complexities of our social order, the question arises as to whether it is wrong to penalize these individuals unfairly in carrying out the responsibilities of such offices. Is it right to expect them to sacrifice income, and to steal time from their duties as physicians to carry out activities which might be performed better by hired, specially trained personnel?

ELI LILLY AND COMPANY AIDS FLOOD VICTIMS

Eli Lilly and Company, in accordance with its long-established policy, is replacing all Lilly products in pharmacies and hospitals ravaged by the flood in the Missouri and Mississippi River Valleys. Lilly representatives in a dozen states, from Montana to Missouri, have been directed to make the replacement of flood-damaged Lilly pharmaceuticals and biologicals their first order of business. Eli Lilly and Company has been replacing stocks damaged by uninsurable hazards as far back as the 1906 San Francisco disaster.

Along with the replacement of stocks, the Lilly company maintains a reserve supply of typhoid vaccine and other biological products which is kept ready for fast shipment during disasters. The shipping personnel of the company stands by twenty-four hours a day.

As the flood waters recede, the replacement of normal stocks will be made as fast as drug stores, hospitals, and wholesale druggists reopen their doors. In the event of a threat of an epidemic, however, needed drugs are shipped directly to the affected area by the fastest possible means of transportation.

PRESIDENT'S ADDRESS*

CHARLES R. HENRY, M. D.
Little Rock

To have the privilege to serve as president of the Arkansas Medical Society, I count as one of the most joyous occasions of my life. It is thrilling to be an active part of one of the leading medical societies in the United States—a society which has assumed leadership in protecting the health of the people of the nation—a society which is commanding the attention of the country for its progressive program in rural health—a society which recognizes its responsibility to mankind and is alert in finding new channels for service in this constantly changing world. The Arkansas Medical Society, because of the accumulative service rendered by its membership is a vital force in the American Medical Association.

This society is to be congratulated on the feeling of friendship and the fine cooperation which exists among its members.

While this year has been a peaceful one from political pressures, it has been most busy and time-consuming, the achievements have been because of you, the membership, and I am grateful for the work you have done and the fine spirit in which each has contributed.

Highlighting our achievements is the success of your Arkansas Medical and Hospital Service. A celebration dinner in honor of the 100,000th member was held last month. You helped to inaugurate the program by making a loan of \$10,000—which was repaid last year. From a starting capital of \$30,000 in 1949, your contribution to providing better health care for the citizens of Arkansas, has grown into a service organization which in the past twelve months has paid benefits to subscribers, hospitals and physicians of more than a million and a half dollars. You are to be congratulated upon your support of Blue Cross-Blue Shield program. Although support lags in some quarters, I am sure that this will be overcome in a short time. Your continued interest will assure a strong bulwark against those who seek to criticize and belittle the intents of the medical profession. The physicians of the Board of Trustees, and the Liaison Committee have given unselfishly of their time in helping to carry forward this fine work. Dr. Ellery Gay, President of the Board of Trustees deserves praise

*Delivered at banquet, Seventy-sixth Annual Session, Arkansas Medical Society, Little Rock, April 22, 1952.

for his leadership and Mr. Jack R. Redheffer for his outstanding work as Executive Director. Here in this organization again is demonstrated true democratic processes in operation. Physicians as leaders, the hospital administrators and consumers, all working harmoniously together to relieve the financial burden of illness.

The first rural health conference held in Little Rock last August has been designated by national leaders in the field as the best one held in the United States. You recall that the attendance was more than 650. The enthusiasm, the friendliness and more than anything, the confidence exhibited has not been equalled elsewhere. So outstanding was the rural health conference, I am told, that a popular weekly picture magazine of a distribution of three million copies or more, is interested in coming to our party this year. Your society provided the leadership and contributed many hours of planning to this successful enterprise. I wish to thank the Arkansas Gazette and the Arkansas Democrat for the excellent and generous coverage of this conference. My sincere thanks to Arnold Henry, Chairman of the Rural Health Committee, members of the committee: my thanks to the co-sponsors: the Arkansas State Dental Society, the Extension Service, the Farm Bureau Federation, the Council of Home Demonstration Clubs and the Auxiliary to the Arkansas Medical Society. One is aware in a very short time that large groups of people just don't gather; for this rural health conference didn't "just happen." The sponsors and the co-sponsors worked at assembling people to participate in this program of health betterment for our people. There are many tangible accomplishments as result of this meeting. The intangibles are expressed as confidence in you, my friends, the physicians of this state.

As a gynecologist, I can speak with authority about women. Without the Woman's Auxiliary, the Arkansas Medical Society would lose much of its effectiveness, and if the Arkansas Medical Society worked and produced as much as its distaff side, the American Medical Association would probably move to Little Rock. Your Auxiliary is no panty-waist pink-tea group, but a strong, alert and courageous society of women who clearly understand the functions of the Auxiliary and who assiduously execute constructive projects each year, I am extremely fortunate to

have had the help and support, hearty cooperation and encouragement from the Auxiliary. Notably among the achievements of the Auxiliary are the program of nurse recruitment, the sponsored radio programs, health education through showing the film "Breast—Self Examination," distribution of literature outlining the various functions of the American Medical Association and active participation in community and civic organizations. Through the Legislative Committee, I am told that a very large percentage of women have their poll taxes paid and will be ready to vote during the coming elections.

It is fitting that we pay tribute to those physicians who served so valiently during the recent tornado disaster. This society is proud of these fine men and their contribution toward relieving human suffering.

Fine rapport has been established with the Arkansas Pharmaceutical Association. Dr. T. Duel Brown served you admirably in this capacity.

Dr. Fred William Harris has given many hours to study and council on the practical nurses program. I am immeasurably pleased with the development of the schools for practical nursing designed for training students and for providing means of raising standards of the already licensed practical nurses. Arkansas is one of the states which is moving forward in this important program.

I wish to thank Mrs. W. A. Snodgrass and her Committee on Decorations for the beautiful floral arrangements which have been such a joy to us all.

My thanks to the Pulaski County Medical Society Committee on Arrangements for all the work they did to make this meeting run so smoothly and for making this one of our outstanding sessions.

I wish to thank every member of the Program Committee and especially the chairman, Dr. Jack Kennedy, for providing such a group of outstanding speakers.

You of the Arkansas Medical Society and your ladies of the Auxiliary have made this a year of achievement. To each, my sincere thanks for his part in making my year so pleasant and so happy.

THE PRESIDENT'S MESSAGE

S. A. DRENNEN, M. D.

Stuttgart

May I take this opportunity to thank those members of our Society who, by their presence, made our recent Convention a real success. It is very gratifying to know that over 40 per cent of our membership registered. The scientific program was very wholesome and constructive.

In the beginning of the new year, I outlined a program in which every member should be interested and one in which every member should cooperate to the fullest extent. The first phase of our program is that of Public Relations.

Down through the years we have become so engrossed with our own scientific work that our relations with the public have been sadly neglected. The pace in which our world is traveling today demands that we come out of our isolated, scientific shells and let the public know that we, too, are human beings and that we, too, want to work for the preservation of our American way of life and the rest of the good things of life handed down to us by our forefathers. To do this we must take more interest in our fellowmen than that of only treating him when he is ill; we must take more interest in our Community Program. If we gouge, gig and overcharge Joe Doakes and merely give him a nod when meeting, how can we expect him to come to our aid when we need him. You must remember we are only an infinitesimal part of both State and Nation. On the State side we number less than 1,200; on the National side we number only 210,000. With this in mind, it behooves us to cultivate all the Joe Doakes; remember his vote counts just as much as ours. After all, as I see it, public relations is the keeping of the Ten Commandments and following the Golden Rule.

The second phase of our program is that of Rural Health. Our organization should be most active in this program. We should lend every assistance in the betterment of our Rural Health. The civic organizations of our State are most interested. This was fully demonstrated by the State Meeting last August; the attendance was very good. I was agreeably surprised in the number of different civic organizations present. These people are interested and we, of the

Medical Profession, should be in the forefront. This, my friends, makes for better public relations. This coming August we will have another State Meeting of Rural Health. May I ask that you members in your respective counties cooperate with your civic organizations. Remember this, interest like this will pay big dividends to us in the future.

The last phase of our program is the American Medical Educational Fund. At this time only a few of our organization are conversant with this set-up. The primary purpose of this Foundation was and is for the purpose of aiding our Medical Schools of the U. S. A.; to keep them from becoming Federalized a very great number of our 79 schools are strained financially by reasons beyond their control. May I cite you an example of our own Medical School. Last year our School received the sum of \$15,000.00 from this fund through the Medical Foundation and did you know there were only three contributors from our organization. I am making no criticism for the reason there has been very little publicity. However, I have appointed a very splendid committee who will, in a very short time, work out a Campaign Program. Remember this is a purely voluntary contribution on your part. You will not be coerced or browbeaten in any manner during this campaign and may I say that you can earmark your contribution to our own School of Medicine and there is where it will go. We have lost some valuable teachers the past two or three years because we were not able to pay them as much as they could get elsewhere. Many, many of you are Alumni of our School and many of you will have boys who will wish to enter dad's Alma Mater. We are all proud of our School; we want it to be a better school of tomorrow.

May I say in conclusion, all committees have been appointed. You will be apprised at an early date.

During my year it is my hope to visit each and everyone of you personally. We must all work together for our present American way of life. Never shall we forget the tenets of Christianity, "The Sermon on the Mount," "The Ten Commandments" and "The Golden Rule." Remembering these, we shall have no fear of the winds and rain of Socialism and Communism.

EDITORIAL

1952-1953 BUDGET
ARKANSAS MEDICAL SOCIETY

By direction of the Council, the budget for the Society as adopted by the Council is printed for the information of the members of the Society.

INCOME

Dues—1,050 members at \$25.00.....	\$26,250.00
Journal Advertising:	
Professional Cards, Local Ads	
and Subscriptions	5,242.15
National Advertising	8,450.00
Interest on Bonds	256.50
Annual Session Exhibit Booth	
Fund	1,434.00
\$5.00 Registration (estimated)	
Annual Session	2,000.00
TOTAL ANTICIPATED INCOME.....	\$43,632.65

EXPENSE

(Estimate based on previous years)

1. Salaries (includes Editor's honorarium and regular legal retainer)	\$10,120.00
2. Printing Journal	13,822.00
3. Travel & Convention	4,650.00
4. Telephone & Telegraph	890.00
5. Office Supplies & Expense	950.00
6. Postage	870.00
7. Freight & Express	35.00
8. Dues & Subscriptions	195.00
9. Rent	600.00
10. Taxes	176.00
11. Contributions	400.00
12. Annual Session Expense	2,100.00
13. Guest Speakers Expense (formerly paid by other agencies) ..	956.00
14. Rural Health Committee	500.00
15. Stationery & Printing	510.00
16. Journal Expense	99.00
17. Auxiliary	1,150.00
18. Special Committees	90.00
19. Auditing	100.00
20. Miscellaneous	350.00
21. Bond Premiums & Insurance....	65.00
22. Office Equipment	315.00
23. Reserve for Legal Services.....	2,500.00
TOTAL ANTICIPATED EXPENSE.....	\$41,443.00
BALANCE	\$ 2,189.65

RANDOM THOUGHTS OF THE SECRETARY

May 7th. With warm weather, Whittaker appears garbed as a medical student.

May 9th. With Goldstein to Waldron for the diagnostic cancer clinic affording opportunity to visit with Wright and for a piece of that super pie at Crutchfield's.

May 17th. By air as far as Bigelow this morning but unable to get below the fog at Adams Field so the patient Senior class gathered for a speaker who did not get there.

May 22nd. Spending the day in North Arkansas, arriving to have breakfast with the youngster at 7:15 A. M., thence to Rogers and at noon for the diagnostic cancer clinic at Siloam Springs, where healthy and lux-

uriant beards adorn the countenances of the local males and we predict Siler and Huskins will draw prizes for theirs, especially as they have now started to carefully comb them.

IN MEMORY OF
DR. P. W. LUTTERLOH

"The Lord giveth and the Lord taketh away." So we bow to the will and wisdom of him who doeth all things well. It is with sorrow and sadness we come to drop flowers on the bier of our friend, comrade and conferee, who has passed to the great beyond. Like the greatest of all physicians he saved others yet, he could not save himself.

If all the good deeds he did to others were flowers we could pluck a rose from every heart here today.

The hour mingles grief, sadness and joy. We are grieved over the loss of a true and tried friend, saddened that our departed member is no longer able to counsel with his family, and that they are deprived of his earthly love and assistance. That our society has lost a valuable member, and that the great concourse of people he served have lost his influence and service, but we rejoice to think of his good deeds and that while he lived he was a valuable citizen adding much to life, living a life of service, and was a worthy member of our scientific body. We also rejoice that the sting of death is lessened by the promise of God, through the redeeming blood of Christ. All who were fortunate enough to have possessed his friendship, or to have beneficiaries of his great goodness will feel a keen sense of bereavement as the result of the passing of Dr. Lutterloh.

He was a man of great sensitivity of soul and one whose many faceted mind ever engaged on the quest for greater knowledge in the cultural fields. A successful physician he learned the law at an age when most are satisfied to stop at further education. And he did it in the same thorough way he did all things.

Dr. Lutterloh was ever thoughtful of others and generous with his knowledge, skill and means. He was a good citizen because in all things he was an upright man.

He has finished his busy useful life. We will leave him to the tender care and keeping of the greatest of all physicians.

Sincerely,

CRAIGHEAD-POINSETT
MEDICAL SOCIETY.

(This was prepared for and read at the funeral services.)

PROCEEDINGS, SEVENTY-SIXTH ANNUAL SESSION ARKANSAS MEDICAL SOCIETY

Hotel Marion, Little Rock, Arkansas
April 21st, 22nd and 23rd, 1952

FIRST GENERAL SESSION

Monday, April 21, 1952, 9:30 A. M.

The meeting was called to order by President Henry.

The invocation was given by the Rev. Richard Hardie, Pastor, Westover Hills Presbyterian Church, Little Rock, Arkansas.

President Henry addressed the session. With John Wilson presiding, the scientific program then followed in order.

"The Indications for Bronchoscopy and Bronchography in Pulmonary Disease"—Herman J. Moersch, M. D., Mayo Clinic, Rochester, Minnesota.

Discussant: Fred Gray, M. D., Little Rock, Arkansas.

"Metabolic Bone Diseases"—Edward C. Reifenstein, M. D., Director of Research, University of Oklahoma School of Medicine, Oklahoma City, Oklahoma.

Discussant: S. B. Thompson, M. D., Little Rock, Arkansas.

"Present Day Treatment of Liver Diseases"—Alfred J. Kahn, M. D., Little Rock, Arkansas.

"Subacute Bacterial Endocarditis"—Thomas H. Hunter, M. D., Assistant Dean, Washington University School of Medicine, St. Louis, Missouri.

Discussant: John W. Ashley, M. D., Newport, Arkansas.

SECOND GENERAL SESSION

Monday Afternoon, April 22, 1952, 1:30 P. M.

The meeting was called to order by the Chairman, Frank Kumpuris. The scientific program followed:

"Post-Operative Care to Prevent Recurrence of Kidney Stones"—Grayson Carroll, M. D., Department of Urology, St. Louis University School of Medicine, St. Louis, Missouri.

Discussant: Carl L. Wilson, M. D., Fort Smith, Arkansas.

"Recent Advances in the Surgical Management of Peripheral Venous Diseases"—Gene B. Starkloff, M. D., Department of Surgery, St. Louis University School of Medicine, St. Louis, Missouri.

Discussant: Henry M. Carney, M. D., Texarkana, Arkansas.

"Eye Injuries"—James T. Allen, M. D., Professor of Ophthalmology, Tulane University, New Orleans, Louisiana.

Discussant: Gardner H. Landers, M. D., El Dorado, Arkansas.

"Diverticulitis of the Colon"—Harvey Stone, M. D., Professor of Surgery, Johns Hopkins University School of Medicine, Baltimore, Maryland.

Discussant: Louis P. Good, M. D., Texarkana, Arkansas.

FIRST SESSION, HOUSE OF DELEGATES

Monday, April 21, 1952

The meeting was called to order by President Henry.

Mr. Schaefer called the roll of Delegates.

The Credentials Committee, H. Fay H. Jones, Chairman, reported that the credentials of the delegates present had been examined, found correct and that a quorum was present. The following delegates by counties were present:

ARKANSAS—R. H. Whitehead, Jr.; ASHLEY—M. C. Crandall; BAXTER—B. N. Saltzman; BENTON—K. A. Siler; BOONE—H. V. Kirby; BRADLEY—W. J. Hunt; CARROLL—J. F. John; CHICOT—H. W. Thomas; CLARK—R. L. Bryant; CLEVELAND—J. H. Scroggin; COLUMBIA—Paul Sizemore; CRAIGHEAD-POINSETT—John T. Gray, Joe Verser; CRITTENDEN—A. C. Parker; CROSS-ST. FRANCIS—A. F. Barr; DESHA—H. T. Smith; DREW—J. B. Holder; FRANKLIN—C. C. Long; JEFFERSON—C. W. Reid; JOHNSON—G. P. Shrigley; LAFAYETTE—Albert Rosendale; LAWRENCE—J. B. Kirkley; LINCOLN—C. W. Dixon; LITTLE RIVER—N. W. Peacock; LOGAN—I. H. Jewell; MILLER—Harry Murry; NEVADA—A. S. Buchanan; POPE-YELL—Robert Hood, J. A. Henry; PRAIRIE—J. C. Gilliam; RANDOLPH—W. E. Hamil; SEVIER—R. C. Dickinson; UNION—Albert Clowney, George Burton; WASHINGTON—V. O. Lesh; WOODRUFF—George S. Napper; PULASKI—Robert D. Jones, Alfred Kahn, Jr., R. E. McLochlin, Hoyt Choate, R. J. Calcote, John Roberts, Joseph A. Buchman, Samuel B. Thompson.

By motion, (Monfort-Thomas) R. H. Whitehead, Jr., was seated as delegate from Arkansas County.

Mr. Wade Willis was introduced and ad-



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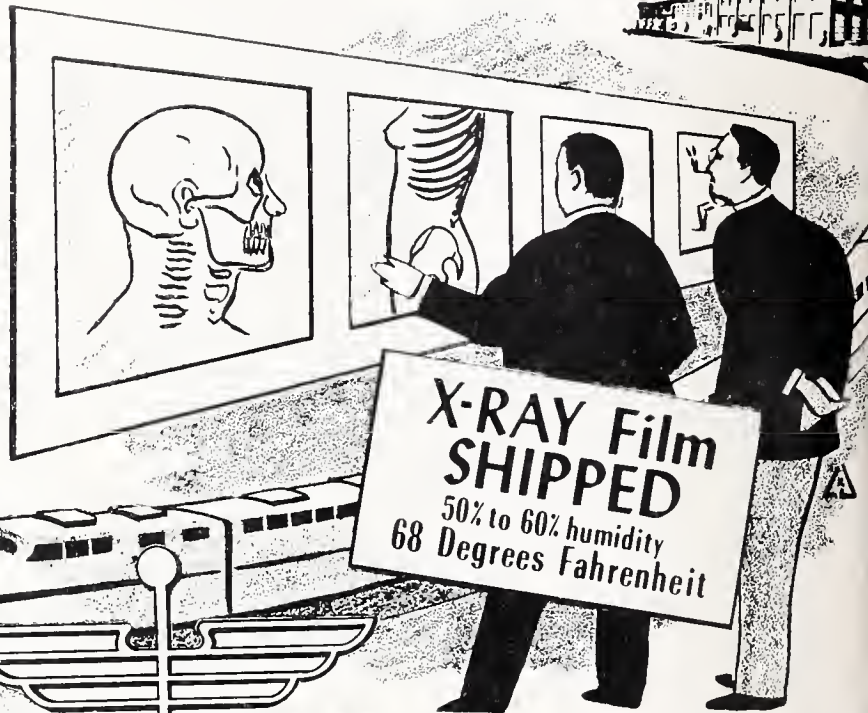
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ressed the house, bringing greetings from the Arkansas Pharmaceutical Association.

By motion, (Monfort-Hundley) the minutes of the Seventy-Fifth Annual Session as published in the June, 1951, issue of the Journal of the Arkansas Medical Society were adopted as correct.

Committees of the Society then reported in order, each report being referred either to Reference Committee No. 1 (F. H. Krock, Chairman, Fount Richardson, Jean Gladden) or to Reference Committee No. 2 (John W. Smith, Chairman, D. E. White, H. King Wade, Jr.).

REPORT OF THE COUNCIL

Louis K. Hundley, Chairman

Action taken by the Council during the year 1951-1952 is herewith outlined and submitted to the House of Delegates:

The Council met on June 3, 1951, and took the following action:

1. Earmarked sum of \$1,500 to be used for guest speakers at 76th Annual Session.
2. Voted \$300 reimbursement to Shuffield for expenses in connection with Medical Legislation Committee.
3. Employed Mr. Paul Schaefer as Executive Secretary to succeed Mr. Wrightsman, who resigned.

The Council met on October 21, 1951, and took the following action:

1. Raised rates 10 per cent on local advertising in the Journal of the Arkansas Medical Society.
2. Directed the Executive Secretary to pay bills submitted by Committees only upon prior approval of the Council.
3. Agreed to waive dues for members in good standing who are called to active duty in the Armed Forces.
4. Authorized expenses for attendance of delegate at the National Rural Health Conference in Denver on the 28th of February, 1952.

The Council met on November 25, 1951, and took the following action:

1. Elected Charles R. Henry special Delegate to attend the Clinical Session of the American Medical Association in place of the regularly elected delegate, W. R. Brooksher, and the alternate, Shuffield, who were unable to attend.
2. Authorized use of Society mailing list by Arkansas Heart Association.

At a meeting on January 6th the Executive Committee authorized payment of expenses for Mrs. Lawson to attend the National Rural Health Conference in Denver, February 28, 1952.

The Council met on March 2, 1952, and took the following action:

1. Directed the Legislative Committee to attempt to have the cigarette tax earmarked permanently for the operation of the University of Arkansas School of Medicine.
2. Turned over \$364.90 accumulated by a previous Committee on Postgraduate Study to the present Postgraduate Committee.
3. Decided to pay for banquet tickets for guests from Society funds.
4. Decided to leave committee organization as it is for the time being.
5. Increased Pulaski County Woman's Auxiliary Annual Session allowance by \$50 to \$200.
6. Accepted in principle the budget for 1952-53 presented by Budget Committee.

7. Authorized purchase of equipment for Society headquarters.

8. Initiated a drive for the support of American Medical Education Foundation Fund.

9. Increased the salary of the Executive Secretary to \$450 per month and his assistant to \$185 per month.

10. Approved a plan for establishing a system of preceptorship at the School of Medicine. Plan to be presented to the House of Delegates.

11. Approved Society participation in Arkansas School Health Conference.

REPORT OF LEGISLATIVE COMMITTEE

Joe Shuffield, Chairman

Arkansas is free from unauthorized practice of the healing arts to a greater extent than it has ever been, and is in much better shape in that regard than are many other states. At least we may say that charlatans do not find our state an attractive residence for their operations.

Constant watchfulness is necessary to preserve this condition, as determined efforts are made at every session of the Legislature to widen the field of permissible practice by those whose field of operation is limited, because of lack of preparation required of those who do not practice in the orthodox manner. Senate Bill No. 30, introduced in the 1951 session by Dr. Crow, and other bills which were introduced in both Houses, are examples of such efforts.

It may be that our medical practice act should be revised, somewhat on the order of House Bill No. 301, which we caused to be introduced at the last session, and which met the opposition of Senator (Dr.) Crow, with the result that it was not acted on by the Senate, although called for a vote on two occasions in that body. This will have our further study.

For years we have been concerned with the fact that when an enlarged teaching hospital should be provided, that a considerable increase in the revenue for the medical school would be necessary. The Medical Center teaching hospital will not fulfill its proper function unless ample income is provided for its operation and maintenance. For that reason we are hopeful that the present cigarette tax will be continued as at present, so that the hospital may be completed and equipped, and thereafter properly fulfill its mission as a great educational hospital.

We feel that at last we are fully abreast of other states in the matter of medical education. We all desire our medical school to be held in the highest respect and esteem throughout America. Even with its previously meager facilities it has fulfilled the dreams of its pioneer founders and of the generations of doctors who have fostered and nurtured it. It is now entering this mid-century decade erect and sturdy, and prepared for greater service to our people. But we must continue to support this movement, for a nursing school must be provided, and other urgent needs will have to be met, so we must not permit to be discontinued a source of revenue equal to what we are now receiving.

Much good can be accomplished by talking with the candidates for legislative positions, by our members. Local influence is of great weight with Senators and Representatives, and we urge you to cultivate their favor, and advise them that we represent your interests, and that we will faithfully advise them of what you want.

(Other committee reports previously printed in the March, 1952, Journal of the Arkansas Medical Society).

Mr. Bill Davenport, representing the Student American Medical Association reported on his

organization's activities and thanked the Society for providing \$100 for travel expenses for the local chapter.

Dean Hayden C. Nicholson of the University of Arkansas School of Medicine presented a plan for establishing preceptorships as part of the curriculum at the Medical School.

J. J. Monfort read the proposed amendments to the Constitution and By-Laws as published in the January and February issues of the Journal of the Arkansas Medical Society. The amendments as revised, were unanimously adopted as follows:

1. That Article V of the Constitution be amended to read as follows: "The House of Delegates shall be the legislative body of the society, and shall consist of: (1) Delegates elected by the component county societies; (2) The Councilors; and (3) ex-Officio, the President, President-Elect, Speaker and Vice-Speaker, Secretary and Past-Presidents of the Society, provided, however, that the ex-officio members shall have the power of voting on all subjects except the election of officers."

2. That Article IX (Sections 1 and 2) of the Constitution be amended to read as follows: "Section 1. The Officers of this Society shall be a President, President-Elect, three Vice-Presidents, Speaker, Vice-Speaker, a Secretary, a Treasurer, 10 Councilors, 10 Vice-Councilors and an Executive Secretary." Section 2. The President-Elect and Vice-Presidents, the Speaker and Vice-Speaker, the Secretary and the Treasurer shall be elected annually, each to serve a one-year term. On the expiration of his term as President-Elect, that person shall automatically succeed to the Presidency and shall serve as President for the ensuing year. Each year, five Councilors and five Vice-Councilors shall be elected to serve a two-year term. All officers shall serve until their successors are installed."

3. That Article X be deleted in its entirety.

4. That Chapter VI (Sections 1, 4 and 5) of the By-Laws be amended to read as follows:

"Section 1. The President shall preside at all meetings of the Society and shall appoint all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged, and shall perform such duties as custom and parliamentary usage may require. He shall be the real head of the profession of the state during his term of office, and, as far as practicable, shall visit by appointment, the various sections of the state and assist the Councilors in building up the county societies, and in making their work more practical and useful."

"Section 4. The Treasurer shall give bond in the sum as directed by the Council. He shall demand and receive all funds due the Society, together with bequests and donations. He shall pay money out of the Treasury only on a written order of the Secretary; he shall subject his accounts to such examination as the House of Delegates may order, and he shall annually render an account of his doings and of the state of the funds in his hands."

"Section 5. The Secretary, in case of vacancy in the office of Executive Secretary, shall assume the duties of that office pending the filling of the vacancy, and shall perform such other duties as are imposed by the Constitution and By-Laws. He shall be the scientific and professional adviser of the Executive Secretary, and shall assist the Executive Secretary concerning all matters without the jurisdiction of one not holding the degree Doctor of Medicine. The Secretary, as defined by the Consti-

tution, shall be known as the Constitutional Secretary and shall give bond in the sum as directed by the Council. The amount of his salary shall be fixed by the Council."

5. That Chapter VI of the By-Laws include Sections 7, 8 and 9 as follows:

"Section 7. The Speaker shall preside at the meetings of the House of Delegates and shall perform such duties as custom and parliamentary usage require."

"Section 8. The Vice-Speaker shall officiate for the Speaker in the latter's absence or at his request. In case of death, resignation, or removal of the Speaker, the Vice-Speaker shall officiate during the unexpired term."

"Section 9. The Executive Secretary shall be the directing manager of the Society's Headquarters and Journal offices, and shall supervise the work of all salaried employees in the Society's offices. Such supervision shall be subject to directives from the House of Delegates, the Council, the Executive Committee and the President of the Society. He shall discharge the administrative functions of the Society not within the duties of other officers or of committees to perform. He shall assist, at their request, all officers and committees, and shall keep himself informed in regard to non-professional matters affecting the medical profession, for the purpose of keeping himself qualified to perform the services herein mentioned. He shall be responsible for the execution and carrying out of the policies of the Society and in that connection shall perform all specific tasks committed to him by the Committees, the Council, and the Officers of this Society. The amount of his salary shall be fixed by the Council and he shall give bond in the sum as directed by the Council."

6. That Chapter VII (Sections 1, 2 and 4) of the By-Laws be amended to read as follows:

"Section 1. The Council shall meet on the first day of the Annual Session and daily during the session and at such other times as necessity may require, subject to the call of the chairman or on a petition of three Councilors. It shall meet on the last day of the Annual Session of the Society to organize and outline the work for the ensuing year. It shall elect a chairman. It shall, through its chairman, make an annual written report to the House of Delegates."

"Section 2. Each Councilor shall be organizer, peace-maker and censor for his district. He shall visit the counties in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall be prepared to make an annual written report of his work, and of the condition of the profession of each county in his district at the Annual Session of the House of Delegates. The necessary traveling expenses incurred by such Councilor in the line of the duties herein imposed may be allowed on a properly itemized statement; but this shall not be construed to include his expenses in attending the Annual Session of the Society."

"Section 4. The Council shall have authority to organize the physicians of two or more counties into societies, to be suitably designated so as to distinguish them from district societies, and these societies, when organized and chartered, shall be entitled to all rights and privileges provided for component societies until such counties shall be organized separately."

7. That Chapter VIII (Section 1) of the By-Laws be amended to read as follows:

"Section 1. The standing committees of this Society shall be as follows:

1. A Committee on Scientific Work.
2. A Committee on Medical Legislation.
3. A Committee on Health and Public Instruction.
4. A Committee on Medical Education and Hospitals.
5. A Committee on Public Relations.
6. A Committee on Medical Economics.
7. A Committee on Scientific Exhibits.
8. A Committee on Arrangements.

Unless otherwise provided, these committees shall be appointed by the President. Each committee shall consist of at least three members. A greater number may be appointed whenever circumstances require a larger committee. The President and Secretary shall be ex-Officio members of all committees."

8. That Chapter XI of the By-Laws be amended to read as follows:

"The House of Delegates may amend any chapter of these By-Laws by a two-thirds vote of the Delegates present at any Annual Session, provided that each amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been published twice during the year in a bulletin or Journal of this Society, or sent officially to each component society at least two months before the meeting at which final action is to be taken."

Mr. Schaefer then read resolutions previously approved by the Council, for the consideration of the House:

1. Opposing federation of the National Health and Welfare Foundations.

2. Endorsing fluoridation of Public Water supplies.

Both resolutions were given to Reference Committee No. 1 for their recommendations.

Mr. Leo Brown, Director, American Medical Association Department of Public Relations, was introduced by President Henry and addressed the House on the progress of public relations work.

The House then selected the following Nominating Committee: 1st District, Joe Verser; 2nd District, S. A. Albright; 3rd District, A. F. Barr; 4th District, H. T. Smith; 5th District, George Burton; 6th District, H. E. Murry; 7th District, R. L. Bryant; 8th District, John Watkins, Jr.; 9th District, H. V. Kirby; 10th District, Guy Shrigley.

The House then adjourned.

Monday Evening, April 22, 1952

The Pulaski County Medical Society was host at a dance given in the ballroom of the Hotel Marion at 9:00 P. M. Breakfast was served at 11:00 P. M.

THIRD GENERAL SESSION

The meeting was called to order by President Henry.

The scientific program then proceeded in order:

"Estrogen Therapy"—Laman H. Gray, M. D.,

Professor, Obstetrics and Gynecology, University of Louisville School of Medicine.

Discussant: Walter Jones, M. D., Texarkana, Arkansas.

"Consideration of Obstetrical Bleeding"—Andrew A. Marchetti, M. D., Professor and Chairman, Department of Obstetrics and Gynecology, Georgetown University School of Medicine, Washington, D. C.

Discussant: Eugene T. Ellison, M. D., Texarkana, Arkansas.

"Management of Breech Presentation"—Albert H. Aldridge, Chief Surgeon, Woman's Hospital in the State of New York, New York.

Discussant: Willis E. Brown, M. D., Little Rock, Arkansas.

MEMORIAL SESSION

April 22, 1952, 11:30 A. M.

Ballroom, Hotel Marion

President Henry presided.

The invocation was given by the Very Rev. Cotesworth Pinckney Lewis, Dean, Trinity Cathedral, Little Rock.

A vocal trio, Mesdames Jack Peeler, Floyd Chronister, Bob Brice, accompanied by Mr. George Miller, sang "Blessed Are the Departed" by Blumner.

The Very Rev. Lewis gave the Memorial address.

The trio sang "One Sweetly Solemn Thought," by Ambros.

President Henry read the names of the following deceased Society members:

Robert Lee Hutcherson, Jonesboro, April 26, 1951.

W. O. Loftis, Alexandria, Louisiana, May 11, 1951.

Paul B. Moberley, Fort Smith, May 12, 1951.

A. D. Gillium, Belleville, June 5, 1951.

M. E. McCaskill, Little Rock, July 9, 1951.

J. S. Liebond, Greenbrier, August 2, 1951.

C. B. Billingsley, Fort Smith, September 12, 1951.

R. C. Kory, Little Rock, September 28, 1951.

A. W. Keith, Stamps, September 28, 1951.

W. S. Ellis, Fordyce, November 22, 1951.

Wm. B. Crowgey, Scott, December 11, 1951.

W. T. Moore, Marshall, December 25, 1951.

J. R. Dibrell, Little Rock, February 24, 1952.

L. L. Hassell, Conway, March 2, 1952.

George Harrod, Conway, April 11, 1952.

The trio sang "God Shall Wipe Away All Tears."

The service was concluded with a benediction.

SPECIAL SECTIONS MEETINGS

Monday, April 21, 2:00 P. M.

Coach Room, Hotel Marion

The meeting was called to order by Chairman R. E. McLochlin.

The scientific program then proceeded in order:

"Steroids in the Treatment of Bone Diseases"—Edward C. Reiffenstein, M. D.

Questions and Answers.

"Medical Treatment of Suppurative Lung Disease"—Herman J. Moersch, M. D.

Questions and Answers.

"Indications and Contraindications for Use of Antibiotic Combinations"—Thomas J. Hunter, M. D.

EYE, EAR, NOSE AND THROAT

Tuesday, April 22, 9:30 A. M.

Rendezvous Room, Hotel Marion

The meeting was addressed by Chairman Ellis Gardner and the scientific program proceeded in order:

"Pathological Findings on Enucleated Eyes"—Dr. John G. Watkins, Jr., Little Rock, and Dr. E. L. Wilbur, Little Rock.

Discussion by Dr. J. F. Henry, Jr., Little Rock.

Luncheon was served at 12:30 with Round-Table Discussion and Business Meeting.

"Allergies of the Ear, Nose and Throat"—Dr. French K. Hansel, St. Louis.

"Treatment of Bilateral Abductor Paralysis of the Larynx"—Dr. A. J. Brizzolara, Little Rock.

SURGERY

Tuesday, April 22, 1952, 9:30 A. M.

Colonial Room, Hotel Marion

The meeting was called to order by Chairman Henry G. Hollenberg and the scientific program proceeded in order.

"Hernia"—Gene B. Starkloff, M. D.

Questions and Answers.

"Bladder Tumors"—Grayson Carroll, M. D.

Questions and Answers.

"Handling Acute Intestinal Obstructions"—Harvey Stone, M. D.

OBSTETRICS AND GYNECOLOGY

Tuesday, 2:00 P. M.

Coach Room, Hotel Marion

The meeting was called to order by Chairman Eugene T. Ellison and the scientific program proceeded in order:

"Total Hysterectomy"—Albert H. Aldridge, M. D.

"Female Stress Urinary Incontinence"—A. A. Marchetti.

"Indications for Gynecologic Surgery"—Laman H. Gray, M. D.

An informal discussion period followed each presentation.

FOURTH GENERAL SESSION

Tuesday, April 22, 1952, 1:30 P. M.

The meeting was called to order by Chairman D. W. Goldstein and the scientific program proceeded in order:

"Autonomic Nervous System"—Motion Picture—Joe Markee, M. D., Department of Anatomy, Duke University School of Medicine, Durham, North Carolina.

"Skin Cancer"—Lawrence Zell, M. D., Little Rock, Arkansas.

"Surgery of the Hand"—Kenneth G. Jones, M. D., Little Rock, Arkansas.

"Accidents—Chief Cause of Death in Children"—Joseph L. Rosenzweig, M. D., Hot Springs, Arkansas.

"Symptomatic Treatment of Bronchial Asthma"—Thomas G. Johnston, M. D., Little Rock, Arkansas.

"The Use of Artificial Radioisotopes as X-ray and Radium Substitutes in Radiation Therapy"—I. Meschan, M. D., Little Rock, Arkansas.

"Management of Diseases of the Thyroid"—William W. Nichols, Colonel, M. D., Hot Springs, Arkansas.

Tuesday Evening, April 22, 1952
7:15 P. M.

The annual dinner and dance was held in the hotel ballroom. American Medical Association President John W. Cline was the principal speaker.

FIFTH GENERAL SESSION

Wednesday, April 23, 1952, 9:30 A. M.

The meeting was called to order by Chairman S. A. Drennen and the scientific program proceeded in order.

"Recent Advances in Pediatric Surgery"—Joe Buchman, M. D., Little Rock, Arkansas.

"A Report of the Arkansas Hospital and Medical Service"—Ellery C. Gay, M. D., and Mr. Jack Redheffer, Little Rock, Arkansas.

"Medullary Fixation of Long Bone Fractures"—John D. Christian, M. D., Samuel B. Thompson, M. D., Little Rock, Arkansas.

"Prognosis of Heart Disease"—Robert Hood, M. D., Russellville, Arkansas.

"The Surgical Management of Prostatic Obstruction"—Hugh F. Rives, M. D., Little Rock, Arkansas.

"Polypoid Disease of the Colon and Rectum and Its Relation to Cancer"—John Laurens, M. D., Little Rock, Arkansas.

FINAL SESSION, HOUSE OF DELEGATES

Wednesday, April 23, 1952, 1:30 P. M.
Ballroom, Hotel Marion

The House of Delegates was called to order by President Henry. The following delegates and members seated as delegates by action of the House were present:

ARKANSAS—R. H. Whitehead, Jr.; ASHLEY—M. C. Crandall; BAXTER—B. N. Saltzman; BENTON—K. A. Siler; BOONE—H. V. Kirby; BRADLEY—W. J. Hunt; CARROLL—J. F. John; CHICOT—H. W. Thomas; CLARK—R. L. Bryant; CLEVELAND—J. H. Scroggin; CRAIG-HEAD-POINSETT—John T. Gray, Joe Verser; CROSS-ST. FRANCIS—A. F. Barr; DESHA—H. T. Smith; DREW—J. B. Holder; FAULKNER—C. A. Archer, Jr.; FRANKLIN—C. C. Long; GARLAND—H. K. Wade, E. M. Smith, R. H. Atkinson; GRANT—Miles F. Kelly; GREENE-CLAY—N. J. Latimer, Henry Edstrom; HOWARD-PIKE—Dewey Duncan; INDEPENDENCE—L. T. Evans; JOHNSON—G. P. Shrigley; LAWRENCE—J. B. Kirkley; LINCOLN—C. W. Dixon; LOGAN—I. H. Jewell; MILLER—Harry Murry; NEVADA—A. S. Buchanan; POPE-YELL—Robert Hood, J. A. Henry; RANDOLPH—W. E. Hamil; SEBASTIAN—Fred H. Krock; SEVIER—M. L. Norwood; UNION—Albert Clowney, George Burton; WHITE—Claude Barnett; PULASKI—Robert D. Jones, John G. Watkins, Jr., Alfred Kahn, Jr., Joe H. Sanderlin, R. J. Calcote, John Roberts, Joseph A. Buchman, Samuel B. Thompson, Joe Shuffield, Robert Calcote.

Joe Verser presented the report of the Nominating Committee:

Presidents-Elect

Dr. R. C. Dickinson, Horatio, Arkansas
Dr. L. H. McDaniel, Tyronza, Arkansas

Vice-President

First Vice-President — Dr. William Snodgrass, Little Rock, Arkansas

Second Vice-President — Dr. J. G. Gladden, Harrison, Arkansas

Third Vice-President—Dr. A. F. Barr, Cherry Valley, Arkansas

Treasurer

Dr. Dan Autry, Little Rock, Arkansas

Secretary

Dr. W. R. Brooksher, Fort Smith, Arkansas

Delegate to A.M.A.

Dr. W. R. Brooksher, Fort Smith, Arkansas

Alternate Delegate

Dr. Sherod A. Drennen, Stuttgart, Arkansas

Speaker of the House of Delegates

Dr. Joe Verser, Harrisburg, Arkansas

Vice-Speaker

Dr. John G. Watkins, Little Rock, Arkansas

Councilors

First District—Dr. M. O. Peeler, Jonesboro, Arkansas, Councilor and Dr. John Gray, Jonesboro, Arkansas, Vice-Councilor

Second District—Dr. J. J. Monfort, Batesville, Arkansas, Councilor and Dr. Hugh Edwards, Searcy, Arkansas, Vice-Councilor

Fourth District—Dr. L. K. Hundley, Pine Bluff, Arkansas, Councilor and Dr. H. W. Thomas, Dermott, Arkansas, Vice-Councilor

Sixth District—Dr. Harry E. Murry, Texarkana, Arkansas, Councilor and Dr. E. V. Dildy, Nashville, Arkansas, Vice-Councilor

Eighth District—Dr. John W. Smith, Little Rock, Arkansas, Councilor and Dr. Ed Gray, Little Rock, Arkansas, Vice-Councilor

Tenth District—Dr. J. M. Kolb, Clarksville, Arkansas, Councilor and Dr. Roy I. Millard, Russellville, Arkansas, Vice-Councilor

Fraternal Delegates selected to represent the Arkansas Medical Society at Annual Medical Society Meetings in other states were as follows:

H. T. Smith, Mississippi

J. J. Monfort, Oklahoma

B. B. Wells, Texas

By motion (Hundley-Monfort) the report of the Nominating Committee was accepted.

By motion (Kolb-Dixon) all nominees other than President-Elect were elected by acclamation.

By vote of the delegates, R. C. Dickinson of Horatio, was elected President-Elect.

By motion (McDaniel-Hunt) the election was made unanimous.

John W. Cline, President of the American Medical Association, was presented to the House and spoke briefly.

The report of the Reference Committee No. 1 was read by Fred H. Krock, Chairman.

REPORT OF REFERENCE COMMITTEE NO. 1

F. H. KROCK, M. D., Chairman
Fort Smith, Arkansas
FOUNT RICHARDSON, M. D.,
Fayetteville, Arkansas
JEAN GLADDEN, M. D.,
Harrison, Arkansas

The following committee reports, which bear no specific recommendations, are accepted and approved as prepared and presented in the Journal of The Arkansas Medical Society for March, 1952, and as supplemented at the meeting of the Arkansas Medical Society, April 21, 1952.

1. Committee on Industrial Health.

2. Committee on Liaison with the Arkansas Dental Society.
3. Committee on Liaison with the Arkansas Pharmaceutical Association.
4. Arkansas State Cancer Commission.
5. Executive Secretary.
6. State Medical Board.
7. The Legislative Committee.
8. Report of the Council.

COMMITTEE ON MATERNAL WELFARE

The report of this committee is accepted and approved. The following recommendations are made which we feel should be adopted by the Arkansas Medical Society:

1. That the present committee be allowed to continue its work in the coming year if it meets with the approval of the President and his Councilors, and if it is felt that the work is of sufficient significance.
2. That the prenatal clinics now established and now being established in the state be given our whole hearted cooperation.
3. That we cooperate with the midwives' teaching program and discourage deliveries by unlicensed midwives.
4. That the physicians in the state be urged to attend the postgraduate courses offered by the University of Arkansas at regular intervals.

COMMITTEE ON HOSPITAL RELATIONSHIP

The report of this committee is accepted and approved. The following recommendations are made and it is felt that they should be approved by the Arkansas Medical Society:

1. It shall be considered desirable that in any dispute involving physicians in the state and hospitals that the Hospital Relations Committee of the Arkansas Medical Society work in close cooperation with the Professional Relations Committee of the Arkansas Hospital Association. By so doing an element of control and supervision can be utilized over hospitals.
2. The Legislative Committee of the Arkansas Medical Society should review Act 481 of the 57th General Assembly and Act 118 of the 58th General Assembly which outline the administrative control of county hospitals within the state.

COMMITTEE ON PUBLIC RELATIONS

The report of this committee is accepted and approved and it is our recommendation that this report be studied carefully by every member of the Arkansas Medical Society. The following recommendation is made which we feel should be submitted to the House of Delegates of the Arkansas Medical Society for appropriate action:

1. It is recommended by this committee to the House of Delegates that they consider seriously either a voluntary donation on the part of members of the Arkansas Medical Society, or an assessment on the part of members of the State Society, or an increase in dues to the members of the State Medical Society, a sum of \$25.00 per member to give the state treasury a total of between \$25,000.00 and \$30,000.00 per year to be used to hire professional public relations personnel and a secretary for this public relations director to carry on a full time public relations program for the Arkansas Medical Society.

By way of comment on the above recommendation we respectfully call your attention to the annual address of our President, Dr. Charles Henry, in which the need for the development of such an activity is stressed, and the talk made by Mr. Leo Brown, Public Relations Director

of the American Medical Association before the House of Delegates on April 21, 1952.

Those who attended the society banquet last night will also recall in the address of Dr. John W. Cline, President of the American Medical Association that great emphasis was placed on the need for a public relations program at a state and local levels.

COMMITTEE ON VETERANS ADMINISTRATION

The report of this committee is accepted and approved. The following recommendation is made which the reference committee feels is worthy of adoption by the Arkansas Medical Society:

1. It is recommended that this committee on Veterans Administration continue to cooperate with other allied groups to further study the Veterans Administration functions so that the highest quality medical care may be provided for the veterans entitled to such service.
 2. It is further recommended that physicians be urged to join the veterans' organizations and participate in the functions as a cooperative measure between the veterans organizations and the medical profession.
- It is felt by the reference committee that this committee should go a step further and recommend that action be taken to cause the Veterans Administration to desist from treatment of non-service connected disabilities in veterans able to pay for this service by private practitioners of medicine, or where such veterans are protected by health insurance or state compensation.

COMMITTEE ON POSTGRADUATE EDUCATION

The report of this committee is accepted and approved. In the report two questions are proposed requiring action by the House of Delegates of the Arkansas Medical Society.

1. Does the Arkansas Medical Society wish the program on postgraduate education continued in the face of failure of the members of the society to take advantage of the program?
- It is the recommendation of the reference committee that the program be continued but that fewer meetings be scheduled throughout the year.
2. Does the Arkansas Medical Society want federal support to continue the program if it is decided to continue it?

It is the recommendation of the reference committee that we accept no federal financial support of any kind to continue this program.

It is also recommended by the reference committee that the committee on postgraduate education to be appointed by our in-coming president, Dr. S. A. Drennen, be composed of the same members appointed by the Arkansas Academy of General Practice for the same purpose.

RESOLUTIONS

The following resolutions were submitted to the House of Delegates and referred to the Reference Committee No. 1 for study:

"WHEREAS, voluntary health and welfare agencies, established and supported by the citizens of the United States, have provided essential medical, research, and educational programs which have brought to the American public a consciousness of the individual responsibility in extension of voluntary health activities,

"NOW, THEREFORE BE IT RESOLVED, by the Arkansas Medical Society, that continued freedom of action be afforded these organizations in the fund solicitations they respectively employ in order that they may further their

aims and ideals as separate units and that they not be forced to participate in any united fund-raising campaign which would serve to destroy their initiative and independence and which would abolish continued voluntary support of these agencies by the individual citizen."

No. 2. "WHEREAS, lengthy tests in many cities in the United States present conclusive and acceptable evidence that the ingestion of small amounts of fluorides during the period of tooth enamel formation produces a harder, more caries resistant enamel, thereby substantially and safely reducing the incidence of dental caries and

"WHEREAS, the fluoridation of water is a most effective approach to improving health through the prevention of dental decay, and is economically advantageous to the public as well as the individual, and

"WHEREAS, the fluoridation of public water supplies is approved and recommended by the American Public Health Association, United States Public Health Service, American Dental Association and the Arkansas State Board of Health, as in the interest of better health, and

"WHEREAS, many Arkansas communities still have not applied this health safeguard to their water supplies for the benefit of their citizens,

"NOW THEREFORE BE IT RESOLVED, that the Arkansas Medical Society endorse the process of fluoridation and encourage all physicians to seek the adoption of a program of fluoridation in every Arkansas community having a public water supply that is deficient in fluoride."

(Signed) ARKANSAS MEDICAL SOCIETY.

The reference committees urges the adoption of this resolution by the House of Delegates.

Respectfully submitted,

REFERENCE COMMITTEE NO. 1.
F. H. Krock, Chairman,
Fount Richardson,
Jean Gladden.

By motion (Thomas and Hunt) the report of the Reference Committee No. 1 was accepted and the resolutions adopted.

The report of Reference Committee No. 2, prepared by Chairman John W. Smith, was read by the Executive Secretary:

Reference Committee No. 2, consisting of Dr. John W. Smith, as Chairman, and Drs. D. E. White and H. King Wade, Jr., as members, submit the following report:

1. COMMITTEE ON CIVILIAN DEFENSE

Committee recommends approval of report as presented.

2. GRIEVANCE COMMITTEE

Committee recommends approval of report as presented.

3. RURAL HEALTH COMMITTEE

Committee recommends approval of report as presented. We also wish to congratulate this committee on its excellent work, and we wish to recommend that the work be continued during the year 1952-1953 under the supervision of the same committee.

4. COMMITTEE ON LIAISON WITH ARKANSAS MEDICAL AND HOSPITAL SERVICE, INC.

Committee recommends approval of report as presented. We also recommend that this group continue to exert every effort to increase individual membership. We also strongly recommend that the public be sold with the understanding that coverage of hospital and physician charges for services rendered does not completely cover the total cost of such services.

5. COMMITTEE ON LIAISON WITH THE AUXILIARY TO THE STATE MEDICAL SOCIETY

Committee recommends approval of report as presented.

6. ADVISOR, ARKANSAS PRACTICAL NURSES ASSOCIATION

Committee recommends approval of report as presented.

7. REPRESENTATIVE, ARKANSAS COMMITTEE FOR IMPROVEMENT OF NURSING SERVICE

Committee recommends approval of report as presented. We also recommend that this committee and the Arkansas Medical Society lend every effort to increase the number of graduate nurses in the State of Arkansas.

8. LIAISON COMMITTEE WITH THE ARKANSAS STATE BOARD OF HEALTH

Committee recommends approval of report as presented.

9. MEDICAL EDUCATION COMMITTEE

Committee recommends approval of report as presented.

10. CANCER CONTROL COMMITTEE

Committee recommends approval of report as presented.

11. TUBERCULOSIS COMMITTEE

Committee recommends approval of report as presented.

12. REPORT OF THE PROCUREMENT AND ASSIGNMENT COMMITTEE

Committee recommends approval of report as presented.

13. REPORT OF THE PROGRAM COMMITTEE

Committee recommends approval of report as presented. This committee recommends that no Veterans Administration or government financed speakers be utilized on the program of the State Medical Society.

We recommend the continuation of the practice of having a large number of outstanding out of State speakers on the program each year.

We recommend that the Program Committee be congratulated for its outstanding program presented this year.

REFERENCE COMMITTEE NO. 2,
(signed) John W. Smith, Chairman.

Upon motion of C. C. Long, seconded by C. W. Dixon, the report was adopted.

SUPPLEMENTARY COUNCIL REPORT

Louis K. Hundley, Chairman, read a supplementary report of the Council as follows:

The Council met at 8:00 A. M. on April 21st, and transacted the following business:

1. Authorized subscription rate to the Journal of the Arkansas Medical Society of \$1.50 per year to Medical Students on a trial basis.

2. Directed that the report by Mrs. Lawson, on the National Rural Health Conference be published in the Journal of the Arkansas Medical Society.

3. Approved a resolution supporting the Fluoridation of Public Water Supply.

The Council met at 12:15 on April 21 and transacted the following business.

1. Directed that a resolution be written regarding the drive to consolidate charity drives and presented to the

House of Delegates. McDaniel, Richardson and Burton appointed as a committee to write the resolution.

2. Approved the revised budget presented by the Budget Committee and directed that it be published in the Journal.

3. Unanimously urged Dr. W. R. Brooksher to continue as Secretary of the society.

The Council met at 12:30 April 22nd, and transacted the following business:

1. Approved life and affiliate membership for the following:

RECOMMENDED FOR LIFE MEMBERSHIP

J. F. Brewer	Lonoke County
S. A. Southall	Lonoke County
S. D. Weil	Garland County
A. R. Hederick	Logan County
J. O. Cotton	Searcy County
P. Leo Hathcock	Washington County
T. S. Jordan	Columbia County
G. E. Mullins	Columbia County
W. P. Cooksey	Columbia County
H. M. Kitchens	Columbia County
D. A. Mohler	Monroe County
E. M. Gray	Baxter County
J. F. Gullledge	Benton County
A. L. Peacock	Benton County
W. Earl Hamil	Randolph County

RECOMMENDED FOR AFFILIATE MEMBERSHIP

Gibbs Biscoe	Desha County
J. L. Parker	Ashley County
H. E. Cockerham	Ashley County
J. M. McCants	Ashley County
Henry T. Gray	Cross-St. Francis County
C. H. McKnight	Monroe County
Jack M. Irvin	Grant County
Shelby Atkinson	Pulaski County
James I. Scarbrough	Pulaski County
Jonathan R. Hoyt	Ashley County

2. Decided to present to the House of Delegates a resolution adopted by the Arkansas Academy of General Practice regarding seizure of American Industry.

The Council met at noon April 23rd, and transacted the following business:

1. Directed the Executive-Secretary to attend the American Medical Meeting in June.

2. Approved the holding of the annual Arkansas Breakfast at the American Medical Association Session.

3. Referred the question regarding extending the vote to the Vice-Councilors at the House of Delegates to the committee on revision of the Constitution and requested that the committee report to the House of Delegates at the next annual session.

By motion (Hunt-Thomas) the supplementary report was accepted.

The following nominees to fill vacancies occurring on the State Board of Health, selected by members from the First, Fourth and Fifth Congressional Districts were presented to, and approved by the House of Delegates:

First Congressional District

1. Dr. Thomas Wilson, Wynne, Arkansas
2. Dr. Floyd Dozier, Marianna, Arkansas
3. Dr. R. Block Hamilton, West Memphis, Arkansas

Fourth Congressional District

1. Dr. A. S. Buchanan, Prescott, Arkansas
2. Dr. W. J. Hunt, Warren, Arkansas
3. Dr. W. S. Riley, El Dorado, Arkansas

Fifth Congressional District

1. Dr. Allen Cazort, Little Rock, Arkansas

2. Dr. Charles Archer, Jr., Conway, Arkansas

3. Dr. J. Arnold Henry, Russellville, Arkansas

The following resolution was presented to the House:

"WHEREAS, the seizure of the steel plants of this country by the President of the United States is an unprecedented action in our country; and whereas, if he can without authority of law seize one industry he can by the same stroke of his pen at his will seize any industry, business or profession; and whereas this action by the Chief Executive could be used to bring about Socialism and government control by the simple means of Presidential Decree rather than by law; and whereas, this action constitutes a great threat to basic American freedoms. Therefore, it be resolved, that the Arkansas Medical Society pleads with the members of Congress from Arkansas to take necessary legislative steps to curb dictatorial powers of the Chief Executive of the United States before the time arrives when the Congress of our Country comes to be a mere Puppet Congress; and be it further resolved, that copies of this resolution be sent to all members of Congress from Arkansas and the President of the American Medical Association and that answers be requested giving the opinions of the people to whom the resolution is sent."

Upon motion (Evans-Dixon) the resolution was adopted. Thomas, moved, seconded by Evans that a copy of the resolution be sent to the President of the United States, and to all Arkansas Representatives and Senators in the United States Congress. Motion passed unanimously.

By general agreement the House adopted the following resolution:

"RESOLVED that the Arkansas Medical Society desires to record its sincere appreciation and express its heartfelt thanks to the Pulaski County Society, particularly the Arkansas Medical Auxiliary and the individual members thereof; also to the management of the Hotel Marion, for the unbounded hospitality shown each member of the Society. We shall ever hold in pleasant memory the hours spent in such companionship as we have enjoyed during our 76th annual session, due to the contributions made by these several agencies."

There followed a discussion of the Public Relations Committee's recommendation that a full time Public Relations expert be employed, and that Society dues be increased to \$50 per year to cover the cost of a Public Relations program. Upon motion (Kolb-Dixon) it was decided to have the incoming president appoint a committee to organize a Public Relations program and present it to the Council for Council approval. Motion carried.

House adjourned.

FINAL GENERAL SESSION

President Henry called the meeting to order and presented the following Past Presidents who were seated on the rostrum: O. J. T. Johnston, Joe F. Shuffield, H. T. Smith, S. J. Albright, Earle H. Hunt, Euclid M. Smith, H. Fay H. Jones, E. F. Ellis, A. S. Buchanan, M. L. Norwood, H. King Wade.

President Henry addressed the House outlining the accomplishments of the Society during his tenure of office and expressing his appreciation for the cooperation he had received.

President-Elect Sherod A. Drennen was escorted to the rostrum and took the oath of office as administered by the outgoing President Henry.

President Drennen then addressed the House, outlining

his goals for the Society during his term of office.

L. H. McDaniel then escorted President-Elect Dickinson to the rostrum. Dr. Dickinson thanked the Society for the honor accorded him.

By motion (Kolb-Dixon) the Society accepted the invitation of the Pulaski County Medical Society, extended by Ed Gray, to meet in Little Rock in 1953.

By motion (Kolb-Thomas) the Society adjourned.

COMMITTEES FOR 1951-53

COMMITTEE ON INDUSTRIAL HEALTH

L. P. Good, Chairman	Texarkana
H. F. H. Jones	Little Rock
John D. Olson	Fort Smith
H. A. Causey	Pine Bluff
Sam B. Thompson	Little Rock

COMMITTEE ON LIAISON WITH ARKANSAS STATE BOARD OF HEALTH

Hoyt Allen, Chairman	Little Rock
H. E. Murry	Texarkana
H. W. Thomas	Dermott
W. B. Connolly	Helena
John T. Herron	Little Rock

COMMITTEE ON CANCER CONTROL

Fred Hames, Chairman	Pine Bluff
John Wilson	Magnolia
R. H. Willet	Jonesboro
A. D. Cathey	El Dorado
Wm. G. Cooper	Little Rock
Friedman Sisco	Springdale

COMMITTEE ON TUBERCULOSIS

J. D. Riley, Chairman	Booneville
Robert Dale	Star City
Ralph Kramer	Fort Smith
Joe H. Hardin	Little Rock
M. C. Crandall	Wilmot
Ed G. Hopkins	Nashville
Frank Adams	Hot Springs

COMMITTEE ON HOSPITAL RELATIONS

A. S. Koenig, Chairman	Fort Smith
R. B. Dickinson	De Queen
Thomas G. Price	Wynne
P. R. Anderson	Arkadelphia
Willis Brown	Little Rock

COMMITTEE ON PUBLIC RELATIONS

Dale Alford, Chairman	Little Rock
M. H. Harris	Newport
Robert McCrary	Forrest City
C. R. Henry	Little Rock
Lewis Hyatt	Monticello
L. A. Drewery	Camden
Elvin Shuffield	Little Rock

COMMITTEE ON ANNUAL SESSION

Alfred Kahn, Chairman	Little Rock
Eugene T. Ellison	Texarkana
S. C. Monroe	Pine Bluff
L. F. Gordy	Conway
Owen W. Beard	Little Rock
Lawrence Zell	Little Rock

RURAL HEALTH COMMITTEE

J. Arnold Henry, Chairman	Russellville
Elvin Shuffield	Little Rock
B. N. Saltzman	Mountain Home
C. R. Henry	Little Rock
Harold Bell Wright	Waldron

Jabez Jackson	Newport
Norman K. Smith	Pocahontas
Walter H. Lane	Dover
J. P. Price, Jr.	Monticello
Julius Hellums	Dumas
John B. Kirkley	Imboden

COMMITTEE ON VETERANS

ADMINISTRATION

Edwin F. Gray, Chairman	Little Rock
O. J. T. Johnston	Batesville
M. L. Dalton	Brinkley
Max F. McAllister	Fayetteville

COMMITTEE ON LIAISON WITH ARKANSAS MEDICAL AND HOSPITAL SERVICE, INC.

(Blue Cross-Blue Shield)

Roy I. Millard, Chairman	Russellville
S. J. Allbright	Searcy
B. M. Gardner	Star City
Robert Thompson	Fort Smith
W. J. Butt	Fayetteville
Clark M. Baker	Paragould
H. M. Carney	Texarkana
Wm. H. Breit	Harrison
Dallas Dalton	Camden
W. H. Pruitt	Mountain Home
Paul Woods	Hot Springs
C. A. Taylor	Batesville
Ralph Joseph	Walnut Ridge

COMMITTEE ON MEDICAL EDUCATION

Jean Gladden, Chairman	Harrison
H. T. Smith	McGehee
John P. Price, Jr.	Monticello
Isadore Meschan	Little Rock

COMMITTEE ON LIAISON WITH THE AUXILIARY

D. H. Autry, Chairman	Little Rock
R. C. Dickinson	Horatio
C. R. Henry	Little Rock

COMMITTEE ON MATERNAL WELFARE

Clyde Rodgers, Chairman	Little Rock
A. S. Buchanan	Prescott
James C. Hodges	Fort Smith
Paul T. Stroud	Jonesboro
B. N. Saltzman	Mountain Home

COMMITTEE ON CHILD WELFARE

L. T. Evans, Chairman	Batesville
R. H. Whitehead, Sr.	DeWitt
A. F. Barr	Cherry Valley
J. S. McKinney	El Dorado

COMMITTEE ON POSTGRADUATE EDUCATION

Randolph Ellis, Chairman	Malvern
J. B. Stewart	Fort Smith
R. B. Robins	Camden
Willis Brown	Little Rock

COMMITTEE ON MEDICAL LEGISLATION

Joe F. Shuffield, Chairman	Little Rock
M. L. Norwood	Lockesburg
John Watkins	Little Rock
Ralph Hamilton	West Memphis
R. L. Caloway	Batesville
D. L. Owens	Harrison
B. E. Barlow	Dermott
E. R. Browning	Hot Springs

J. W. Dorman Springdale
 Joe Rushton Magnolia

COMMITTEE ON CIVILIAN DEFENSE & DISASTER RELIEF

Joseph Buchman, Chairman Little Rock
 Robert Ross Little Rock
 C. A. Archer, Jr. Conway
 B. B. Wells Little Rock
 M. J. Kilbury Little Rock
 Leeman King Hot Springs

COMMITTEE ON THE A.M.E.F.

Joe Shuffield, Chairman Little Rock
 George Burton El Dorado
 K. A. Siler Siloam Springs
 Clifton C. Long Ozark
 Gordon Oates Little Rock
 Howard S. Stern Pine Bluff
 Austin F. Barr Forrest City
 V. A. Dildy Nashville
 Paul Woods Hot Springs
 John D. Ashley, Jr. Newport
 J. H. McCurry Cash

ADVISOR TO THE STUDENT AMA FROM THE STATE SOCIETY

A. G. Talbot DeWitt

ADVISOR TO THE ARKANSAS PRACTICAL NURSES ASSOCIATION

Fred Wm. Harris Little Rock

ARKANSAS COMMITTEE FOR THE IMPROVEMENT OF NURSING SERVICE

Martin Hawkins Searcy

REPRESENTATIVE TO THE ARKANSAS STATE DENTAL ASSOCIATION

John Greutter Little Rock

REPRESENTATIVE TO THE ARKANSAS PHARMACEUTICAL ASSOCIATION

T. Duell Brown Little Rock

WATCHING IT

"I first noticed the lump in my breast over a year ago; it didn't bother me but I thought I should tell my doctor. He said that we should 'watch it.' I saw him several months later and it hadn't changed in any way so he said to 'watch it.' I was in an auto accident and was examined by another doctor. I asked him about it and he said it would be all right to 'watch it.' Finally, a friend of mine urged me to see still another doctor. He explained that it was probably not serious but would be best out. Now I know that it was cancerous and I have had what they call a 'radical'; I feel fine and my doctor is very hopeful that I have been cured."

This is a verbatim report from a 40 year old intelligent and "well adjusted" business woman in Westchester County and the date is 1952.

No further comment is necessary!

—Westchester (N. Y.) Medical
Bulletin, May, 1952.

PUBLICITY FOR DOCTORS

Personal relations between physicians and the public could be improved by teaching more students both family doctoring and medical science, declared Dr. Paul Williamson of the Tennessee Medical School at a meeting of the Arkansas Academy of General Practice in connection with the Arkansas Medical Association annual convention.

The next morning the medical society heard its retiring president, Dr. Charles R. Henry, advise the employing of a professional public relations director.

It's perfectly all right with us, if the doctors hire a public relations expert. He would probably be a big help to the press.

But a regiment of the most agreeable, eager-beaverish public relations men couldn't create any better feeling for their clients than can one good doctor who serves his community day in and day out.

A night visit to the bedside of a sick child can do more to make the medical profession appreciated than can miles of newsprint. The sympathetic manner of a doctor after he has listened to all the patients in his waiting room carries more weight than a carload of literature on medical problems.

The physician who thoroughly understands and conscientiously ministers to his patients remains the best advertisement that the profession can ever have.—Arkansas Democrat, April 24, 1952.

Of course the matter of expense has been a big drawback. Hospitalization comes high, but that problem is being solved as more people turn to insurance to take care of their needs. The Blue Cross-Blue Shield plan, sponsored by the profession itself, is proving to be a boon to many, and there are scores of independent companies who offer every sort of hospital and medical policy, ample to cover these expenses.

We hold to the belief that the medical profession can best serve the people when it is free of federal interference, that hospital and medical insurance is best when it is offered by free and independent companies in competition with each other to give the most service at the least cost. And that such service should be bought voluntarily and not forced on anyone who may not want it.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

DELAYS IN THE DIAGNOSIS OF TUBERCULOSIS FROM THE INCAUTIOUS USE OF ANTIBIOTICS

By WILLIAM H. OATWAY, JR., M. D.,
Arizona Medicine, July, 1951

It was noted recently that case histories of newly admitted patients to a California sanatorium mentioned the use of penicillin and other drugs for supposedly non-tuberculous conditions. This often happened without any attempt to exclude or make a diagnosis of tuberculosis. It was decided to recheck such information by questioning the patients. The results were amazing.

Forty per cent of the fifty patients in residence on February 15, 1951, had suffered to some degree from the "blind" use of chemotherapy.

A—Chemotherapy without Examination for Tuberculosis

1. A woman, age 25. "Cold" with pleurisy, treated with SULFADIAZINE and PENICILLIN. Hemoptysis caused patient to insist on an X-ray. Far advanced exudative lesion found with cavity. (Delay—two months.)
2. A woman, age 26. "Bad cold" treated with PENICILLIN and AUREOMYCIN. Diagnosis by SURVEY film. Far advanced exudative lesion with cavity. (Delay—two months.)
3. A woman, age 26. "Bronchial trouble" with asthma, then "pleurisy" for one year. PENICILLIN inhalations. Diagnosis made with gastric culture. X-ray shows a subminimal lesion. (Delay—one to two years.)
4. A woman, age 29. "Virus infection" treated with PENICILLIN. Diagnosis made by chance SURVEY film of moderately advanced exudative disease with cavity. (Delay—two weeks.)
5. A man, age 22. "Pneumonia" with asthma, diagnosed without X-ray. Treated with PENICILLIN. Diagnosed by SURVEY film which showed scattered exudative patches with numerous small cavities. (Delay—possibly two years.)
6. A woman, age 69. "Virus pneumonia" diagnosed without X-ray. PENICILLIN given. Diagnosis by SURVEY film later; moderately advanced lesion. (Delay—six months.)
7. A woman, age 38. "Bad cold" treated with PENICILLIN. X-ray was not made until a SURVEY film was taken, three months and two doc-

tors later. Lesion moderately advanced. (Delay—six weeks.)

8. A woman, age 36. "Colds" then "pleurisy." Therapy with CHLOROMYCETIN for one week. SURVEY film showed far advanced disease with cavity. (Delay—one to three months.)

B—Chemotherapy with the Tuberculosis Lesion Misinterpreted

1. A man, age 46. "Bad cold" treated with PENICILLIN injections and inhalations. X-ray showed patchy lesions. No further study was made. SURVEY film showed slight increase in moderately advanced tuberculosis. (Delay—18 months.)
 2. A woman, age 45. After accident an effusion from trauma was noted, plus a patchy lung lesion. No other diagnosis made. "Virus pneumonia" the next winter treated with STREPTOMYCIN because of sensitivity to PENICILLIN. A persistent fever forced a diagnosis of far advanced tuberculosis with atelectasis and cavity. (Delay—two years.)
 3. A woman, age 54. "Lobar pneumonia." No X-ray, but "sulfa" given. Recurrent "Virus X" bronchitis three years ago. Fluoroscopy done occasionally. PENICILLIN and AUREOMYCIN used. Patient continued to work as a nurse. X-rays now show far advanced disease with a large cavity and bronchogenic spreads. (Delay—three to six years.)
 4. A woman, age 39. "Virus infection" treated with "sulfa," later with PENICILLIN, then with TERRAMYCIN. SURVEY film read as negative. Pleural effusion with tubercle bacilli found. Earlier films reviewed and seen to contain minimal lesion. (Delay—four to five months.)
- #### **C—Chemotherapy in Known But Forgotten Cases of Tuberculosis**
1. A woman, age 27. Tuberculosis known for eight years, but called inactive. "Flu." PENICILLIN, AUREOMYCIN, and TERRAMYCIN were tried. A pleural effusion resulted in the diagnosis of tuberculosis activity. (Delay—one month.)
 2. A man, age 36. Tuberculosis known for four

years, considered to be arrested. Overwork and strain followed by "intestinal flu." Hemoptysis resulted in a diagnosis of exudative and cavitative disease. (Delay—six weeks.)

3. A man, age 44. Tuberculosis known for 10 years. A "cold" and several "sore throats." PENICILLIN therapy used, but stopped because of reactions. An active far advanced tuberculosis was diagnosed by X-ray later in the year. (Delay—six months.)

4. A woman, age 42. Tuberculosis known for 10 years. "Virus flu" treated with AUREOMYCIN, was followed by hemoptysis. Diagnosis of active far advanced tuberculosis. (Delay—one year.)

5. A man, age 38. Tuberculosis 14 years ago. Limited service in the Army Medical Corps. Life insurance X-rays read as negative. A "cold" with bronchitis. PENICILLIN, then AUREOMYCIN. X-ray showed bilateral far advanced exudative tuberculosis with new cavitation. (Delay—two to four months.)

6. A man, age 46. Tuberculosis known six years ago when a "strep throat," treated with SULFADIAZINE, relapsed and the lung disease was recognized, treated and arrested. A year ago he had bronchitis. Rest and antibiotic pills used. Moderately advanced tuberculosis finally diagnosed. (Delay—2 to 12 months.)

7. A man, age 45. Tuberculosis treated 10 years ago, and observed since by X-ray. For past year SULFADIAZINE and PENICILLIN were used repeatedly for "bronchiectasis." No sputum examination. Sent to sanatorium with far advanced fibrocavernous disease. (Delay—one year.)

8. A woman, age 52. Tuberculosis was known 14 years ago and treated for four years. A "virus" infection two months ago was accompanied by fever, chills, etc. Therapy was PENICILLIN, CHLOROMYCETIN and AUREOMYCIN, but no X-ray was taken. She returned to work as a nurse, IN THE NURSERY OF A HOSPITAL. An X-ray showed far advanced disease with a 10 cm. cavity. (Delay—two months.)

The reported 20 cases were fortunate enough to be diagnosed. Hundreds are in the sanatoriums and thousands in the general public right now whose tuberculous condition is being obscured by non-specific antibiotic therapy. These, and the persons to whom it could happen in the future, are the ones which greater care can protect.

Chemotherapy for lung infections may be hazardous if tuberculosis is not ruled out as a cause

of the symptoms. Twenty patients in a sanatorium of 50 beds have had an appreciable delay in the diagnosis of tuberculous activity because of the use of chemotherapy and the lack of X-rays, bacterial studies, and clear thinking. The newer antibiotics give a false sense of security because of their broad field of action. The drugs are efficient and attractive, but they must be aimed more precisely at specific and vulnerable infections. The physician and patient both seem to be responsible for the delay in diagnosis. Persons who have had tuberculosis are especially at fault if they do not check on the cause of lung symptoms. A chest X-ray survey has helped some of the present patients to a diagnosis. It would be valuable to have inexpensive case-finding facilities available, and physicians would be wise to use them.

OBITUARY

PEARLIE W. LUTTERLOH, age 68, died at his home in Jonesboro May 15th. Born in Chataba, North Carolina, he attended Hendrix College and graduated from Washington University School of Medicine in 1910. He located at Jonesboro in 1910 and had continuously practiced there since graduation. He was a member of the Masonic bodies, the Methodist church, the Jonesboro Country Club and the Rotary Club and of the Arkansas Medical Society. He was a fellow of the American Medical Association and of the American College of Surgeons. He had served as president of the First Councilor District Medical Society, the Craighead-Poinsett County Medical Society, the Mid-South Postgraduate Medical Assembly, the Jonesboro Rotary Club and the Arkansas Medical Society. He served as division surgeon for the Frisco and the Cotton Belt railroads at Jonesboro. Surviving him are his wife, a son and a daughter.

"The advances toward longer and healthier American lives have been brought about by medical research, expanded hospital facilities and improved local health services, the Report pointed out."—Press release on annual report of U. S. Health Service, April 1, 1952.

Surely a few practicing physicians helped out a little bit!!

PERSONALS AND NEWS ITEMS

MARRIED—On April 14, Miss Dorothy Dailey, Norfolk, Virginia, and W. T. Holman, Jr., Van Buren.

M. C. Hawkins, Searcy, addressed the Arkansas Hospital Association, Hot Springs National Park, May 5, on "Hospitals in Time of Disaster."

S. A. Drennen, Stuttgart, has been reelected a director of the Arkansas Wildlife Federation.

R. B. Robins, Camden, addressed the Kentucky Academy of General Practice at Louisville May 1.

The American Medical Education Foundation has announced receipt of a contribution in April from J. L. Cavener, Little Rock.

The following were registered at the Cleveland session of the American College of Physicians: A. A. Blair, Chas. T. Chamberlain, Fort Smith; M. L. Gottlieb, James R. Hughes, O. C. Melson and B. B. Wells, Little Rock; and S. M. Wilson, Rogers.

Robert Watson, Little Rock, attended the Atlantic City session of the American Neurological Society during May.

The American Medical Education Foundation announced receipt of contributions in April from Hugh R. Edwards, Searcy, and from the Porter Rodgers Hospital, Searcy.

A. S. Buchanan, Prescott, and J. E. Cox, Ross-ton, were honored at a dinner by the Nevada County Medical Society April 8th on the occasion of their completion of 50 years in the practice of medicine.

L. H. McDaniel has been elected president of the Tyronza Rotary Club.

Ellis Gardner, Russellville, has been elected chairman of the Pope County Council, Boy Scouts of America.

George Burton, El Dorado, has been elected president of the Ark-La-Tex Academy of Medicine.

J. J. Monfort, Batesville, attended the recent session of the Oklahoma State Medical Associa-

tion at Oklahoma City as fraternal delegate from the Arkansas Medical Society.

Dr. and Mrs. K. A. Siler, Siloam Springs, spent a month's vacation at Seattle.

Dr. and Mrs. Harold B. Wright, Waldron, spent a recent vacation on the west coast.

C. S. Wilson, J. D. Huskins, K. A. Siler, Siloam Springs, and D. W. Goldstein, M. B. Hoge and W. R. Brooksher, Fort Smith, conducted a diagnostic cancer clinic at Siloam Springs May 22nd under the sponsorship of the Benton County Medical Society and the Arkansas Division, American Cancer Society.

James W. Headstream and Hugh F. Rives have formed The Urology Clinic with offices in the Waldon Building, Little Rock.

CORRESPONDENCE

April 15, 1952

Arkansas Medical Journal,
Fort Smith, Arkansas.

Dear Sirs:

Yesterday, April 14th, 1952, I had been practicing medicine 50 years. It was one of the biggest day's practice I had in the entire 50 years. Besides having an unusually busy day in the office I delivered a pair of twin boys, each weighing 7 pounds. It was a home delivery, and that made six children for the couple and I had delivered all of them. After office hours I returned to the house where I made my first call, and had some pictures made. I returned to Gillham, the place I began practice.

I am now beginning my second 50 much better equipped than I was to begin the first 50. I have a nice, modern office of 8 rooms; a good car, modern equipment in the office and 50 years of valuable experience. My first office was in the rear of Ed Turrentine's drug store at Gillham, my transportation was a borrowed horse, and my equipment consisted of a new set of saddle bags.

I have made 16 home deliveries this year, in that number, two sets of twins, and my records show several more of like engagements in the approaching months.

I look forward with much enthusiasm to my future practice and thoroughly enjoy the practice of my chosen profession.

Respectfully yours,

J. S. Hendricks, M. D.

PROCEEDINGS OF SOCIETIES

The fourth annual session of the Arkansas Academy of General Practice was held at Little Rock April 20th with the following speakers: "Diseases of the Eye," Forrest Henry, Little Rock; "Treatment of Burns," Ellery C. Gay and E. C. Wilkes, Little Rock; "Head Injuries," Edmund A. Smolik, Saint Louis, and "Undergraduate General Practice Training: A New Concept," Paul Williamson, Memphis. The evening banquet session was addressed by M. D. McClain, Little Rock, President, and R. B. Robins, Camden, President, American Academy of General Practice. Officers elected are: President, H. E. Murry, Texarkana; President-Elect, R. G. Kramer, Fort Smith; Vice-president, J. M. Kolb, Clarksville, and Secretary-treasurer, C. R. Ellis, Malvern.

The Five Counties Medical Society was addressed at DeQueen May 8th by R. B. Robins, Camden, "Medicine in This Changing World." Charles N. Jones, Secretary.

The annual Johnson County Medical Society banquet was held at Clarksville May 14th with 150 guests present.

The Craighead-Poinsett County Medical Society was addressed May 7th by C. S. Sutherland and J. O. Porter on "Placenta Praevia." J. H. McCurry, Secretary.

The Greene-Clay Counties Medical Society met on April 9th, in a joint meeting with the medical Auxiliary for their monthly dinner-meeting.

The principal speakers were: Dr. William T. Black, Jr. and Dr. John D. Hughes, both of Memphis, Tennessee. Dr. Black spoke on "Endometrosis"; Dr. Hughes spoke on "Modern Management of Myocardial Failure."

Speakers before the postgraduate course in obstetrics and gynecology held at the University of Arkansas School of Medicine May 19th and 20th were: Willis E. Brown, E. Clark Gillespie, C. G. Sutherland, Don O. Newland, Eva F. Dodge, Leon Quattlebaum, Duane Warden, M. L. McCaskill, Joe A. Presley, Edwin C. Junck, W. H. Stenstrom, Robert L. Turnbow, and I. Meschan.

The Association of Tumor Clinic Staff Members in Arkansas met at El Dorado May 22nd for the following program: "Bone Tumors," C. L.

Yelton, Fairfield, Alabama; "Brain Tumors," J. Garber Gailbraith, Fairfield, Alabama, and a panel discussion with Sam B. Thompson and Robert Watson, Little Rock, leaders.

The Pulaski County Medical Society was addressed May 5th by Vida Gordon, "Eczema and Allergic Developments"; Sam Phillips, "Recent Developments in the Treatment of Diarrhea"; John Harrell, "General Therapy," and Robert Henry, "Upper Respiratory Infection."

WOMAN'S AUXILIARY NEWS



MRS. GORDON P. OATES
Little Rock

President, Woman's Auxiliary

To the Arkansas Medical Society, 1952-1953

One hundred and ninety-five members of the Woman's Auxiliary to the Arkansas Medical Society registered at the Twenty-Eighth Session held April 21, 22 and 23, in Little Rock at Hotel Marion.

After the pre-convention board meeting a luncheon was held for the general membership with Mrs. James G. Martindale, President of the Woman's Auxiliary to the Arkansas Medical Society, presiding. Dr. R. C. Dickinson, Chairman, Advisory Council and Mrs. Shelby G. Carr, 2nd Vice-President, Woman's Auxiliary to the Southern Medical Association, Richmond, Ky., were guest speakers.

The general session opened at 2:00 p. m. with Mrs. Gordon P. Oates, President, Woman's Auxiliary to the Pulaski County Medical Society, presiding. Mrs. Hoyt Choate of Little Rock gave the address of welcome and Mrs. Jack W. Kennedy, Arkadelphia, gave the response. Mrs. Martindale introduced the special guests. Mrs. Harold F. Wahlquist, President of the Woman's Auxiliary to the American Medical Association, Minneapolis, Minn., Mrs. Shelby G. Carr, 2nd Vice President, Woman's Auxiliary to the Southern Medical Association, Richmond, Ky. Mrs. Mason G. Lawson, 2nd Vice-President, Woman's Auxiliary to the American Medical Association, Little Rock. Mrs. Arthur A. Herold, Director, Woman's Auxiliary to the American Medical Association, Shreveport, La., was unable to attend because of illness. Reports of officers and committee chairmen were read. Mrs. Mason G. Lawson gave a report of the Eighth Annual Conference of the Woman's Auxiliary to the American Medical Association and Mrs. Gordon P. Oates gave a report of the Convention of the Woman's Auxiliary to the Southern Medical Association. Pulaski County Medical Society was host at open house, dancing and breakfast at Hotel Marion, which climaxed the day's activities.

The Past President's breakfast was held Tuesday in the Continental Room with Mrs. Curtis Jones, Sr., acting as Chairman. Mrs. Martindale presided at the second general session beginning at 9:30 a. m. Dr. Chas. R. Henry, President of the Arkansas Medical Society, was guest speaker. The reports of presidents of county auxiliaries were read and the election of officers held. The meeting adjourned at 11:30 a. m. to attend the Memorial session with the Arkansas Medical Society.

Mrs. Gordon P. Oates presided at the luncheon held in the Continental Room at 1:00 p. m. Invocation was given by Mrs. T. Duel Brown. Introduction was made of past presidents, state officers, wives of officers of Arkansas Medical Society and guests. Mrs. George B. Fletcher delighted the group with her unique poems. Mrs. Barton Rhinehart, a past president, received the Distinguished Service Award with Mrs. Charles R. Henry making the presentation. Mrs. Harold F. Wahlquist was guest speaker. Mrs. Mason G. Lawson installed the new officers in a short and impressive service. Mrs. Martindale presented the gavel to Mrs. Gordon P. Oates, incoming president of the Woman's Auxiliary. The annual banquet was held in the Ballroom of Hotel Marion. Governor Sid McMath, Mrs. Har-

old F. Wahlquist and Dr. John Cline of San Francisco, Calif., President of the American Medical Association were guest speakers.

The convention closed on Wednesday morning with a school of instruction and post convention board conference for officers, committee chairmen and county presidents, with Mrs. Gordon P. Oates, newly-elected president, presiding.

The Woman's Auxiliary to the Jefferson County Medical Society met recently in Mrs. John K. Walker's home.

Reports from various committees were heard and Mrs. Howard Stern, Mrs. W. H. Bruce and Mrs. J. Clyde Hart, Jr., gave reports on the state meeting held in Little Rock, April 21, 22 and 23.

Plans were made for the Fourth Councilor District Meeting to be held in Pine Bluff, May 19th.

There were 14 members present.

Mrs. W. K. Riley.

CORRESPONDENCE

Dear Arkansas Alumnus:

We were unsuccessful in organizing an alumnae section at the last Arkansas Medical Society Convention. This does not lessen the need for such an organization, and we hope to continue our plans for a future organization next year. We must keep the interest and plans before us until then. Until there is an organized voice we are only able to work as individuals in planning and developing the medical resources of our state. We should never have to apologize for our school. We should always be able to say with dignity and command of respect that we are from Arkansas. We can do this only by developing a high type of physician who is both medically and civic minded and is able to command the respect of both his colleagues and fellow citizens. An Alumnae Association in our Medical School can help bring this about. Our first duty and obligation is to join now, as soon as possible, the existing University of Arkansas Alumnae Association. Contact Dusty Rhodes at the University and he will give you the details. We urge that you write letters of suggestion, support or criticism to him, myself or Dean Nicholson. We need any support of this movement we can get.

Sincerely,

Eugene H. Crawley, M.D.

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THE *Journal* OF THE *Arkansas* *Medical Society*

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No. 2

SURGERY OF THE HAND*

KENNETH G. JONES, M.D.

Little Rock

Surgery of the hand is primarily a matter of surgery of tendons. Permanent disability of this organ as a sequella to trauma, infection, poliomyelitis, or other disease may, and too frequently does, constitute an insurmountable economic handicap for the patient. Kanaval has aptly stated that "The hand of the working man is his most valuable asset. Without it, life becomes a burden." Loss of function of this important structure is a tragedy of such magnitude that its restoration deserves the special consideration it has received during the past few years. The hand is so exact in its construction that only the most diligent application of sound surgical principles will prove efficacious in its management. Moreover, a thorough knowledge of its intricate anatomy is mandatory for the surgeon who treats the injured hand. Without this knowledge, he may be certain only of uncertain results.

Lange and Lexer's early discussions of tendon surgery were followed in this country by John B. Murphy's contributions. In 1933, Alan Kanaval published his monograph, "Infections of the Hand"; a medical classic that, more than any other work, has served as a stimulant for better care of this important structure. Recently, Koch and Mason of Chicago, Bunnell and Graham on the west coast, Flynn in the East, and many others have made outstanding contributions to the art of tendon repair and transplantation. Slocum and Pratt have stressed the fundamental functions of the hand which are hook, pinch, and grasp. This triple concept provides the surgeon with a basis for evaluation and treatment of the injured upper extremity.

Like other structures of the body, the hand may be disabled from diseases as diverse as tuberculosis, neoplasms, arthritis, poliomyelitis, and other systemic processes, but these are surgical problems that are singular unto the orthopedic surgeon and will not be given considera-

tion in this discussion; while the injured hand is common to all physicians and must be treated by each of us either to the limited extent of rendering first aid or to giving definitive care. Not infrequently, it is the care that the wounded extremity receives initially which determines the extent of residual disability that may follow. Unquestionably, the first few hours post-injury, from the standpoint of functional recovery, are the most important. It is the management of the wounded hand during this period that will be given consideration with emphasis upon the care of the tendons. As stated earlier, surgery of the hand is primarily surgery of tendons.

Miller's analysis of a large number of cases of tendon injuries discloses that volar lacerations occur more frequently than similar injuries on the dorsal aspect of the hand in a ratio of 2:1. Further breakdown, as shown in Table I, reveals that 48% of all volar injuries occur to the digits with the flexor tendon opposite the proximal phalanges sustaining three-fourths of the volar digital injuries, or one-quarter of all tendon injuries sustained by the hand. This preponderance in one small area is especially significant in view of the fact that the poorest results, even in those patients treated by the most skillful surgeons, occur consistently in this area. Bunnell has described the volar surface of the digits and distal palm as the "no man's land of the hand." Poor results in this area are assured if every precaution is not taken by the surgeon. This inherent danger is due to the anatomical crowding within the flexor tunnels opposite the proximal phalanges; two large tendons in intimate contact with one another are compressed into a fibrous tunnel which is lined with a synovial sheath whose function is to assure gliding of the tendons. Moreover, the blood supply of tendons surrounded by tendon sheaths is poor while scar tissue proliferates rapidly.

The remaining 52% of the injuries occurring over the volar surface of the hand are sustained by the palm and wrist. Fortunately, in this region, except for the distal portion of the former, the prognosis is less grave. The blood supply is better, there is more room for proliferation of

* Read before the Seventy-Sixth Annual Session, Arkansas Medical Society, Little Rock, April 22, 1952.

scar tissue and the adherence of one tendon to another is less disabling. In addition, post-operative mobilization of the repaired structures is accomplished more easily.

Injuries to the extensor tendons of the hand—one-third of all tendon injuries occurring in the upper extremity—consistently result in less disability than those sustained by the volar tendons. Primarily this is because their blood supply is better and the loose areolar tissue in which they lie is more adaptable. Also, their tendon sheaths are restricted to the region of the dorsal carpal ligament. In many instances, due to the communications between the common extensor tendons, their suture is unnecessary. Healing will often be found to have occurred within four weeks with no other treatment than simple immobilization in a hyperextension splint.

In regards to causative agents, they are too numerous to mention. It is not so much a matter of the agent that produced the hurt as it is what type of injury resulted from it. A cleanly incised wound, as a rule, offers the most favorable prognosis, for both primary healing and recovery of function. On the other hand, crushing and avulsion injuries as well as deep burns are infinitely more perplexing problems. Even though the prognosis is less good and treatment more difficult, the aim of treatment must remain unchanged.

It behooves the hand surgeon to be ever constantly aware that the object of treatment, beginning at the time of the first examination, is four-fold (Table II). Initial planning should give consideration to each of these goals. It is right that the prevention of infection be considered foremost, since an uncontrolled infection resulting in an extensive destruction of tissue will preclude a satisfactory result. In most instances, the development of the four objectives can proceed concurrently or in sequence. Consideration will be given each in turn.

Altemeier has said, "It must be remembered at all times that it is not a wound that is being treated, but a patient with a wound." A careful history must be obtained (Table III). Even though emphasis is placed upon the injury, one should interrogate the patient sufficiently regarding the general systemic and past history, to determine known abnormalities which might affect the prognosis or treatment. The surgeon should learn all possible regarding the type of accident, and the conditions under which it was sustained. An accident occurring in a clean factory or one which occurs on a dirty street may require rad-

ically different treatment. Initial treatment rendered elsewhere, both to the wound and to the patient as a whole, should be ascertained. Drugs administered earlier must be known to the definitive surgery. Foreign bodies removed from or inserted into the wound, including chemical agents, which are to be condemned, should be noted.

It is of extreme importance to ascertain the time lapse between the injury and the administration of definitive surgery. Hard and fast rules are, as elsewhere, unsatisfactory; but, in general, the primary suture of tendons is contraindicated if the wound is more than six hours old. But many factors affect this arbitrary period. Some wounds can be closed much later, while others should never be closed initially. The location of the wound is of extreme importance. As stated earlier, tendons in sheaths have a poor blood supply and therefore are less capable of controlling contamination. This is especially true of the volar tendons of the digits. The causative agent and the environment at the time of injury are also given consideration. The nature of the wound is of extreme importance. While most helpful in combatting infections of the hand, the antibiotics have not made it possible to extend the probable safe period of six hours between injury and definitive treatment.

The patient is examined (Table IV). At least the basic elements of a general examination are indicated. Local examination of the wound except to control bleeding, or to determine in a general way the extent of the wound, should be deferred until definitive surgery can be undertaken in a modern operating room. Probing into the wound in the emergency room by unmasked personnel is to be avoided. X-rays, if indicated, are obtained prior to surgery. Sensory impairment and loss of active motion of joints, must be sought for before the induction of anesthesia, which should be either general or regional. The status of the sensory distribution to the hand by the ulnar, median, and radial nerves must be accurately delineated. Active flexion and extension of the intrinsic and extrinsic muscles activating the hand are sought for. The thumb is examined for the integrity of its opponens mechanism.

The remainder of the examination is carried out under anesthesia with a blood pressure cuff applied about the upper arm for use as a tourniquet. The character as to rate, source, and color of the bleeding is observed. The extremity is then elevated for three minutes, or, if the wound

is considered clean, a Martin bandage may be used, and the tourniquet inflated. Clots are wiped away and the nature and severity of the wound is observed. Foreign bodies are sought for. Exposed bones and joints are examined and the lacerated and crushed tendons noted. The degree of treatment to be administered is determined by the surgeon.

Treatment (Table V) of the patient is both general and local. Pain, shock, and loss of body fluids are treated as indicated. Tetanus antitoxin, or toxoid, and antibiotics are administered unless contraindicated because of sensitivity. Specific local treatment is dependent upon several factors that may be grouped under the following headings: one, whether or not the wound can be converted into a clean wound; two, facilities available; and three, the skill and experience of the surgeon. The surgeon may choose to limit initial treatment to first aid, or, after having obtained a thorough knowledge of the wound and taking the above factors into consideration, he may effect a debridement, control of bleeding, and closure of the skin and subcutaneous tissue only, by approximation of the skin edges or by skin grafting, if necessary. Only the dirtiest wounds that cannot be converted to clean wounds should be left open. Secondary repair of unsutured tendons may follow primary healing by three weeks to one year.

A third alternative for the hand surgeon is to suture the nerves leaving the tendons for a secondary operation. Fourthly, he may effect an initial repair of all structures including the tendons either by primary suture of the tendon or by tendon grafting. Bunnell has advocated removal of both the flexor profundus and flexor sublimus in the case of their laceration opposite the proximal phalanges and substitution with a tendon graft extending from the base of the hand to the base of the distal phalanx. However, Koch and Mason have demonstrated that resection of the flexor digitorum sublimus tendon and the removal of their common tendon sheath so that the suture line of the flexor digitorum profundus lies in the subcutaneous fat, will yield satisfactory functional results. Tendon grafts are most applicable when there is a loss of tendon substance or in the case of delayed tendon repairs where scarring of the local structures is excessive. Grafts may be obtained from either the flexor digitorum sublimus, palmaris longus, or the long extensor of the toes.

In no other branch of surgery is a satisfactory result so dependent upon the meticulous tech-

nique of the surgeon (Table VI). A trained anesthetist, a well-equipped operating room, an adequate number of assistants, and the proper instruments must be available. Large abdominal clamps, thumb forceps, and retractors are a liability in tendon surgery. Eye instruments are infinitely more applicable. Small Halsted clamps and a very fine Adson thumb forcep, along with the proper suture material, are extremely useful for the apposition of those sensitive structures. A bloodless field is assured by the application of an inflatable tourniquet to the upper arm. Roller gauze bandage is used for reinforcement of the cuff to insure an even pressure over the arm. Skin preparation is limited to a thorough ten minute scrubbing with soap or one of the newer detergents; after which, the extremity is draped in such a manner that it can be freely positioned within the operative field as dictated by the changing need of the surgeon. When convenient, it is desirable to place the extremity upon an arm board so that the surgeon and his assistants might be seated during the repair that is often lengthy.

After the wound has been inspected, it is thoroughly debrided with the removal of all devitalized skin, subcutaneous tissue, tendons, muscle, bone and even nerve. The wound is irrigated with as much as ten to twenty liters of normal saline. This is best accomplished by having an open flask suspended from an intravenous stand with sterile tubing leading into the operative field. The flask can be refilled by the circulating nurse without interfering with the surgeon. A sterile pan with a drainage tube leading into a bucket is desirable for removal of the washings. Adequate exposure is mandatory and is obtained by extending those incisions already present, in line with the skin folds, or by creating new ones along proper lines as shown in Bunnell's text. Incisions transverse to flexor creases must not be used. Contracted scars result from such ill-advised incisions in the hand. The exposed tissues are handled as gently as possible and at all times all structures are kept moist with damp sponges soaked in warm normal saline. Damaged blood vessels are ligated. Sectioned nerves and tendons are located and positively identified so that proximal nerve stumps are not sutured to distal tendon stumps and vice versa, as has happened on the volar surface of the wrist. After the wound has been thoroughly debrided, explored, and every structure identified, the tourniquet is deflated and all bleeding points clamped and ligated with a very fine suture material; following which, the arm is ele-

vated for three minutes—by the clock—and the tourniquet reapplied. Suture of the nerves and tendons is then effected. The sectioned nerve is approximated with special care so as not to rotate it about its longitudinal axis. It is sutured with 5 or even 6-0 arterial silk, several small sutures being placed around its periphery but only through the perineurium. Suture of tendons is effected either by 3-0 or 4-0 untreated silk, in which event, the technique of Harmer, Bunnell, or Koch and Mason may be used, or with stainless steel wire according to the pull out wire technique described by Bunnell. Bunnell's pull out technique is especially useful on the volar aspect of the fingers where minimal tissue reaction is essential to obtaining a functional result. Due to the fact that catgut causes considerably more local reaction than either silk or stainless steel wire, it is never indicated in tendon repairs except when suturing tendons directly into bone where scarring may assist its anchorage. Moreover, O'Shay has demonstrated that the incidence of infection in those cases sutured by chromic catgut as compared to silk was approximately six to one.

Either the wound should be closed loosely without drains or left open. The incidence of infection occurring in hand injuries which are closed with a drain in the wound is consistently four times as great as those cases closed without a drain. It is recommended that the deep fascia and the subcutaneous tissues be approximated loosely with either an extremely fine catgut suture such as 4-0 plain or an equally small silk suture. The skin edges are closed without tension as swelling can be anticipated. Skin grafts and pedicle flaps should be used to obtain a primary closure in the case of destruction of soft tissues. If after debridement the wound is still considered to be contaminated, primary repair is not undertaken, but the wound is packed open with an ointment dressing and a secondary closure performed at a later date.

But even after the operative repair, the surgeon's responsibility is far from ended. The post-operative dressing is as important as the surgery itself. An even pressure of an adequate degree is absolutely essential. Homan has observed that this basic principle has been "perennially discovered, discredited, forgotten, re-discovered, and re-affirmed." Koch, Mason, Reid, Orr, and Truetta have also emphasized the need of preventing venous and lymphatic congestion in the extremity and the necessity for maintaining the circulation of the subcutaneous tissue. Un-

controlled swelling is extremely detrimental to the injured hand. Swelling due to any cause accentuates vascular and lymphatic congestion thereby producing tissue anoxia with further loss of fluids and additional swelling. Fibrin deposited in the soft tissues is organized into fibrous tissue resulting in permanent loss of function of the part. Sterile mechanics waste placed over the dressing and held securely by elastic bandages, or stockinette cut on the bias, if properly applied perform this function admirably.

It is well-established that immobilization of the hand tends to produce residual stiffness of its joint: nevertheless, nothing is gained by the constant irritation of damaged tissues which are undergoing the inflammatory process of repair. Hugh Owen Thomas, many years before the present generation of surgeons, asserted, "inflamed and injured tissues need rest." It is the surgeon's responsibility to see that the injured tissues obtain this needed rest. Still, immobilization must not be unnecessarily prolonged. It should be continued as long as necessary, but must be discontinued at the earliest possible date.

Convalescence can be divided into three phases. The first is the immediate post-operative period that extends approximately one week during which fibrin and early fibrous tissue are laid down between the tendon ends. The second phase between the ends of the first and the fourth weeks is the period of organization and formation of the healing process. From the fourth week it is extended until the patient has obtained the maximum amount of recoverable function. Immediately following surgery, during the proliferative stage of repair, the patient should remain recumbent with the extremity elevated on a pillow to encourage drainage and prevent edema. During the formative stage of the healing process, he may be ambulatory and is encouraged to use that portion of the extremity which has not been immobilized.

After removal of the cast and the skin sutures at the end of the fourth week, an intensive phase of physiotherapy is begun. It is extremely important during this period that the circulation of the extremity be protected as swelling of the hand can be anticipated after removal of the cast. The subcutaneous fibrosis that follows edema will inevitably further impair the functional result. Active and passive exercises are instituted. Hydrotherapy in the form of whirlpool and lanolin massages are often beneficial. Dynamic splinting and electrical stimulation are

used in certain specific instances. Encouragement of the patient's efforts by his physician is essential as the result is, as much as anything else, dependent upon the patient's intelligence and his willingness to cooperate in the post-operative treatment. Active exercises must be performed at least five minutes out of every hour. The surgeon must seek the patient's cooperation.

As for results, in those cases of primary suture of the tendons where the destruction of soft tissue has not been extensive and where proper surgical techniques have been used and where the patient has cooperated in the post-operative care, the surgeon can anticipate that approximately 65% of all flexor tendon repairs will produce a satisfactory result; while 90% of his repairs of the extensor tendons will prove to be satisfactory. In some instances, a poor initial result may be improved by secondary operative procedures.

In summary, it should be noted that injuries to the hand, severe and mild, often result in an economic disaster for the patient; and that this disaster may be diminished by adequate definitive care following the accident and, in some instances, by secondary operative procedures at a later date. The injured hand demands the same care as any other major wound. Adequate facilities, consisting of an operating room, proper instruments, and an anesthetist should be available. The specific surgical techniques employed are necessarily dependent upon the skill and the experience of the surgeon, but the following procedures must not be performed: (1) Both long flexor tendons should not be repaired in the distal palm or in the volar tunnels of the digits. Either the profundus alone is sutured or a primary tendon graft is performed. (2) The wound is not drained. It is closed primarily or packed open. (3) Catgut is never used for suture of tendon to tendon. Suture material should consist of either silk or stainless steel wire. (4) The skin edges are not approximated under tension. Skin grafting is used whenever necessary for primary closure of a clean wound. (5) Caustic antiseptics are not used to produce further destruction of tissues. Soap and water or detergents are used for skin preparation. (6) Post-operative bleeding or excessive swelling must not occur. Hemostasis should be complete and the extremity elevated post-operatively. (7) Immobilization is not continued indefinitely, but is sufficient to permit healing. Mobilization, once begun, is pursued by both the patient and the surgeon very assiduously until all function possible has been restored.

TABLE I
DISTRIBUTION OF TENDON INJURIES OF THE HAND
Ratio of flexor injuries to extensor injuries is 2:1

VOLAR INJURIES (66% of all injuries)		
	% of Volar Injuries	% of all Injuries
Digits:	48%	
	% as to Phalanges	
Prox. Ph.	73%	23%
Med. Ph.	25%	
Dist. Ph.	2%	
	100%	
Hand	16%	
Wrist	36%	
	100%	
DORSAL INJURIES (34% of all injuries)		
	% of Dorsal Injuries	
Digits	32%	
Hand	40%	
Wrist	28%	
	100%	

TABLE II
OBJECT OF TREATMENT:

1. Prevent infection
2. Restore anatomy
3. Avoid deformity
4. Early restoration of function

TABLE III
HISTORY:

1. General systemic, including other injuries.
2. Conditions under which the injury was sustained.
3. Type of first aid given.
4. Time lapse between injury and definitive surgery.

TABLE IV
EXAMINATION:

- I. General
- II. Local
 - a. Prior to anesthesia:
 1. Superficial inspection of wound.
 2. Sensory examination: ulnar, median, and radial.
 3. Active flexion and extension of all joints; opposition function of the thumb.
 4. X-rays as indicated.
 - b. Under anesthesia—without tourniquet:
 1. Bleeding: rate, general source, color.
 - c. Under anesthesia—with tourniquet:
 1. Extent of damage.

TABLE V
TREATMENT

- GENERAL:
1. Pain
 2. Shock
 3. Loss of fluids
 4. Tetanus antitoxin or toxoid
 5. Antibiotics
- SPECIFIC: (Alternatives)
1. First aid: control of bleeding and dressing only.
 2. Closure of soft tissues only with secondary repair of tendons three weeks to one year later.
 3. Repair of nerves only and primary closure.
 4. Primary repair, complete.

TABLE VI
TECHNIQUE

1. Anesthesia: general or regional.
2. Equipped operating room.
3. Adequate assistants and instruments.
4. Bloodless field.
5. Skin preparation: soap and water or detergents.
6. Adaptable draping.
7. Thorough debridement.
8. Irrigation with 10 to 20 Liters of normal saline.
9. Use of proper incisions.
10. Gentle handling of tissues.
11. Tissues are kept moist at all times.
12. Ligation of all bleeding points.
13. Positive identification of tendons and nerves.
14. Tourniquet deflated: bleeding checked: re-applied.
15. Repair of nerves without longitudinal rotation using 5 or 6-0 arterial silk.
16. Suture of tendon with 3 or 4-0 silk or stainless steel wire.
17. Loose primary closure—no drains.
18. Skin grafts are used when indicated.
19. Secondary closure if wound remains contaminated.
20. Pressure dressing.
21. Elevation of hand for one week post-operative.
22. Immobilization for four weeks followed by vigorous mobilization.

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RESOLUTION

WHEREAS, an all-wise providence has seen fit to remove from our midst, Dr. John R. Dibrell, who was our valued co-worker and a faithful member of the Pulaski County Medical Society, American Medical Society and the American Medical Association, since 1916, we the members of the society mourn and deeply regret his sudden departure.

WHEREAS, as a physician in his chosen field of medicine he attained a great measure of distinction and won the respect of his colleagues, as well as, the gratitude and love of a host of sorrowing people. He has been an Honorary Member of the Pulaski County Medical Society, since March 9, 1942.

THEREFORE, BE IT RESOLVED, that the Pulaski County Medical Society express to his family the esteem in which he was held as a member of the Society and its heartfelt sympathy to the family at the untimely loss that they have sustained.

BE IT FURTHER RESOLVED, that a copy of this resolution be made a matter of record in the minutes of this meeting; that a copy be sent to the family and a copy to the Journal of the Arkansas Medical Society.

This resolution is respectfully submitted to the members of the Pulaski County Medical Society by your committee:

M. D. McCLAIN,
GORDON HOLT,
O. C. MELSON.

REPORT ON RURAL HEALTH CONFERENCE OF AMERICAN MEDICAL ASSOCIATION

MRS. MASON G. LAWSON
Little Rock

The Seventh National Conference on Rural Health, under the sponsorship of the Council on Rural Health of the American Medical Association, brought more than six hundred people to Denver, Colorado, in February.

A preliminary meeting for State Committees on Rural Health was held the day preceding the Conference with Dr. F. S. Crockett, Chairman of the Council on Rural Health, and Dr. Norman H. Gardner, a member of the Council, presiding.

In pursuing the theme "'The Physician as a Citizen'" Dr. Dwight Murray, Chairman of the Board of Trustees of the American Medical Association announced that the former Committee on Rural Health had now been made a Council and was a permanent part of the American Medical Association with a full time field representative in the person of Mr. Aubrey B. Gates of Arkansas. Dr. Murray said that the Rural Health Council was formed in the interest of health promotion among rural people and that leadership had been assumed by the Medical profession.

The State Committees were urged by Dr. A. E. Spelman, Chairman of the Committee on Rural Medical Service, Missouri State Medical Society, to assist in forming local health Councils by creating an understanding of the purpose of a Health Council. Stimulation of local responsibility and the wholehearted cooperation of the Physician acting as a citizen was considered the first step in forming an effective Health Council.

Miss Charlotte B. Rickman, Health Education Consultant, North Carolina State Medical Society, demonstrated by use of a flip chart the activation and techniques of organizing Health Councils.

In discussing the advantage of having full time Health educators Dr. Fred A. Humphrey said "the whole problem of Rural Health can be solved by **cooperation** and **Education**."

Miss Mable Mack, Home Demonstration leader of Oregon State College, talked on "The Work of a Health Educator."

The theme of the Conference proper, "Help Yourself to Health" with two subdivisions "We have Helped Ourselves to Health" and "These Things We Can Do" was developed throughout the following two days by both the producers and the consumers of Medical service with great emphasis on individual responsibility.

Dr. George F. Lull, Secretary and General Manager of the American Medical Association, Chicago, Illinois, gave greetings to the Conference.

Dr. F. S. Crockett, Chairman of the Council on Rural Health gave a brief resume of the National Rural Health Program.

Dr. John W. Cline, President of the American Medical Association, said that "Rural health must provide more than medical service. Farm people must be educated on diet—they must have improved sanitation—immunizations—better hospitals must be constructed—home nursing instructions and better selection of clothing. Individual liberty and the American way of life can only be preserved by energy, determination, and all people working together."

In discussing the problem of the Doctor in a rural community Dr. Kenneth Kaisch of Phillip, South Dakota, pin pointed the difficulty the community has in keeping a Doctor by saying "that community must not only be one in which you want to practice medicine, but you must also want to live there."

Dr. Charley J. Smyth, Director of Graduate Education, University of Colorado, discussed the three-year residency in General Practice now in operation at the University. The resident spends a part of his training period in a rural hospital learning the problems and limitations of facilities and becoming a "Generalist" rather than a specialist.

Dr. Harlan English, Chairman of the Illinois Medical Society's Committee on Rural Medical Service suggested that drives for funds for the voluntary Health services, such as Heart, Polio, Tuberculosis, etc., be consolidated into one "Health Dollar Day" and the money collected be distributed in proportion to the incident of the disease.

Dr. J. R. Rodger of Michigan explained that some Health Councils are formed to find the needs of a community, others are formed to fill already existing needs. He advised that in making a Health Council a real asset to the community, one effective project has more value than many projects incomplete.

Dr. Fred C. Hubbard, President of the North Carolina Medical Association, stated that rural health problems cannot be solved on a National or State level, but in the communities in which they exist in an organized, coordinated effort to work with people, not over them.

Dr. Robert Stearns, President of the University of Colorado, addressed the conference on "The

Educators Place in Rural Health" at the evening session.

Mrs. Harold F. Wahlquist, President of the Woman's Auxiliary to the American Medical Association, was the first speaker on the sub-title "These Things We Can Do." Mrs. Wahlquist told the Conference that the Auxiliary's purpose was to augment the program of the American Medical Association. She defined Health Days, which she initiated in Minnesota, as a unified approach to a community health problem—a product of many minds and many hands. Mrs. Wahlquist urged that we act, serve and assume responsibility.

Mr. Beatly H. Dimit, Indiana, Penn., Chairman of the Interim Health Committee, The National Grange, stressed local initiative, less duplication among health groups and a warning against the ideology that we have to look to the Government for help instead of doing the job for ourselves.

Mr. Ferdie Deering, Oklahoma City, Okla., Past President of the American Agricultural Editors Association, told of the health education campaign carried on in the farm publications that has reached sixteen million families.

Mrs. J. L. Taylor, who substituted for Mr. Charles W. Holman of the National Milk Producers Federation, told of the steps which that group has taken to improve the overall health of the Nation with the sanitary production of milk as one of its major objectives.

Mr. Maurice Saults, Associate Director, Extension Service, Iowa State College, explained that the primary job of the extension service was to help people help themselves by—

1. Providing teaching technique.
2. Motivating leadership.
3. Giving information on available resources.

Mrs. Haven Smith of Chappell, Nebraska, representing Mrs. Raymond Sayre, President, Associated Women of the American Farm Bureau Federation, emphasized planning and organization by cooperative efforts. Mrs. Smith said "All groups united will become a mighty force in solving rural health problems."

At the luncheon session Dr. Crockett presented Dr. Albert C. Yoder of Goshen, Indiana, The General Practitioner of the year. Dr. Yoder raised the question "Is Rural Health any Different from City Health?" He said that in the city, people are maimed by cars and the like while in the rural areas people were maimed by tractors and bad bulls—thus modern conveniences have made them more similar.

Mr. Allan B. Kline, Chicago, Illinois, President of the American Farm Bureau Federation, used for the title of his talk "We're All In This Together." Mr. Kline made it clear that the farmer is not asking for favors but for opportunities to earn his own way. In talking of health he said that good nutrition was one of the important factors and that if it is made available to them, the people still have to use it. Mr. Kline pictured the differences between a Democracy and a Dictatorship and warned the group of the rapid movement away from individual responsibility. He urged them to look for better politicians because they write the laws. He asked that we consider a candidate for office for their qualifications, their ability and their courage.

Throughout the Conference Mr. Paul Miller of Lansing, Michigan, Extension Specialist of Michigan State College, conducted group discussions. At the close of each regular session many interesting questions were propounded. Mr. Miller, by the nature of the questions he proposed for group consideration, stimulated the best thinking of those in attendance. One would conclude that no group alone or collectively can solve the rural health problem. They CAN provide adequate medical care, they CAN offer an educational program to acquaint the people of the facilities available to them for their health, care and protection. They CAN stimulate a community to an awareness of its health needs, but health is an individual responsibility and he and he alone must make use of that which has been provided for him to insure his good health.



SEASICKNESS

R. L. BRIER, M.D.*

St. George Island, Alaska

"It will not kill you but will make you so sick you will wish you were dead," is the statement often heard concerning seasickness. Some individuals have a loss of pep, loss of appetite, and slight nausea without vomiting during the first few days of their sea voyage and then soon gain their "sea legs" and have a return to normal feeling.

The most frequent symptoms of seasickness are "discomfort in the epigastric region, varying with the rise and fall of the ship, anorexia, salivation with frequent swallowing movements, headache, dizziness, weakness progressing to faintness, cold perspiration of the skin, pallor of the face, with the oft-described greenish hue. The facial expression which is one of great dejection and apathy, faithfully records the internal feeling. Waves of nausea finally get so strong that the desire to vomit is overwhelming, and after that act is consummated great relief is experienced. The vomiting is very often projectile in character, and there may be little or no nausea preceeding." Even professional mariners occasionally become ill when the ship begins to pitch and roll in an unusual fashion or if they walk to a part of the ship which they are not accustomed to visiting. Many factors have been suggested, however there is still no entirely satisfactory explanation as to its etiology. It is most probable that the different factors may act separately or together in each individual case. (1) The interference with the balancing and stabilizing apparatus of the body due to over-stimulation of the equilibratory organs in the internal ear, (2) mental factor and imagination, (3) eye strain caused by the glare of the sea and sky, (4) frequent movements of the abdominal organs, (5) acidosis.¹

Many methods of treatment have been advocated in the past, among them are: (a) eating a light but nutritious diet for several days before sailing and after getting aboard the ship, (b) lying in a prone position or in a deck chair, (c) fresh air, (d) prevention of eye strain, (e) plugging the ears, (f) use of cathartic, (g) use of drugs containing belladonna or hyoscine, and (h) use of sedatives. During the past few months there has been a few new drugs advocated for seasickness, one of them is B-demethylaminoethyl

benzohydril ether 8-chlorotheophyllinate or the trade name Dramamine. Recently, I was the Ship Physician and sailed from Seattle, Washington, to the Pribilof Islands, Alaska, and back and forth between the islands during which time Dramamine was employed in the prevention and treatment of seasickness. One tablet should be taken before boarding the ship and medication (amount depending upon age) continued while sailing.

Conclusions: A person is less likely to become seasick on a large vessel since there is less rocking and swaying than on a small ship. Dramamine aids in the prevention and treatment of most but not all cases of seasickness. The treatment should be directed mainly toward prevention because once an attack begins it will quite often run its course.

OBITUARY

CHARLES S. HOLT, age 72, died at Fort Smith, June 7th after a long illness. Born in Salem, Illinois, he graduated from Saint Louis University School of Medicine in 1906 and located at Fort Smith in 1908. From 1913 to 1934 he operated Saint John's Hospital in Fort Smith and assumed direction of Sparks Memorial Hospital in 1934, retiring in 1946. He founded the Holt-Krock Clinic in 1921. He was active in civic affairs and in the business community, formerly a trustee of the Arkansas Tuberculosis Sanatorium, associate professor of surgery in the University of Arkansas School of Medicine, member of the Lions Club, trustee for the Mid-West Hospital Association and the Arkansas Hospital Association, president and director of the Peoples Loan and Investment Company, a member of Hardscrabble Country Club, the various Masonic bodies including the Scottish Rite and the Shrine, a member of Saint John's Episcopal church, a fellow of the American Medical Association and the American College of Surgeons. Surviving relatives are his wife and two daughters.

FOR SALE—Two tubes of radium, containing approximately 25 milligrams each, glass and 0.5 mm. silver capsules, with lead container. Price, for quick sale, \$20.00 per milligram. Dr. F. A. Corn, Lonoke, Arkansas.

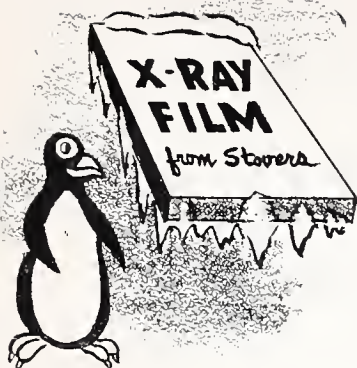
* Physician in charge, St. George Island, Alaska, Department of Interior of the United States of America.

¹ Beckman, Harry: Treatment in General Practice, ed. 2, Philadelphia and London, W. B. Saunders Company, 1934.

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THE PRINCIPLES of the Accli-Bator were proven by seven years of field service before the war . . . hundreds of hospitals found the new approach to the treatment of premature babies, a time, labor and money saver . . . that it saved room by utilizing regulation bassinet equipment . . . that they could afford to give all prematures equally safe and efficient care . . . that parents need not be denied seeing their baby while in the Accli-Bator . . . that they were absolutely safe. Then came the war . . . NOW WE PRESENT the new post-war model No. 470 . . . stronger, safer, lighter, better looking, more efficient, easier to take care of, completely transparent and incorporating new skills, new processes, new materials that took a war to develop.

CABINET OF TRANSPARENT LUCITE affords unobstructed vision, patient can be seen from any angle and from any place in the room. It is light (weighs only 12 pounds) yet it is unbelievably strong and practically unbreakable. It is easy to keep clean, has no cracks, crevices, or tight corners. It is pleasant to look at and you need not hesitate to let the parents see their baby while in the Accli-Bator.

HEAT EVENLY DISTRIBUTED, cool air is taken into the heater housing at the bottom, is passed over the hermetically sealed electrical element and is facilitated forward by the streamlining of the cabinet, so that the temperature is absolutely the same from one end to the other.

THERMOSTATICALLY CONTROLLED, the temperature is automatically maintained by the new type thermostat that operates within one degree, taking care of room temperature changes, and permitting a temperature rise of 30 degrees Fahrenheit.

FOOLPROOF HUMIDITY CONTROL, a cylinder-type humidifier, discharges moisture into the air stream where it too is evenly distributed to all parts of the cabinet. Nothing to get out of order and will not spill when the bassinet is tilted.

FITS STANDARD BASSINET, can be used right in the nursery, conserves space, always ready, easy to watch. The Accli-Bator is placed OVER the patient and is the only incubator

where you do not place the baby INTO an inclosure.

QUICKLY CONVERTED TO OXYGEN, just place the baby entirely within the cabinet, close the head opening with a pillow or blanket, attach the oxygen tube to the inlet-diffuser and as quick as that you have a practical, safe oxygen tent. Remember that the Accli-Bator is approved for use with oxygen by reliable safety bureaus.

SIDE-OPENING DOOR, most incubators have top-opening doors which allow the heat and humidity to escape when opened. The Accli-Bator's side-opening door retains heat and humidity when the door is open.

INSTRUMENTS EASILY READABLE, both thermometer and humidistat are mounted so that they can be easily read from the outside of the cabinet.

SAFETY ASSURED, every Accli-Bator bears a stamp which indicates that it has been inspected and passed by the Los Angeles Bureau of Safety and that it has been approved for use with oxygen.



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ARKANSAS TUBERCULOSIS SANATORIUM

State Sanatorium, Arkansas,
June 12, 1952.

To the physicians, nurses and all the patients:

You all know that I refused to place in our drug room or even to approve or permit the use of isonicotinic acid hydrazide, ISONIAZID, and that I wrote you a letter recently telling you that I had written to the American Medical Association and the National Tuberculosis Association and I now have their replies. Attached is a copy of the reply from the American Medical Association and the National Tuberculosis Association.

It is quite obviously true that last February several new anti-tuberculosis drugs, known to chemists as hydrazine derivatives of isonicotinic acid, were given widespread—and premature—publicity. It was reported that in tests on 190 patients with advanced pulmonary tuberculosis, the new drugs rapidly stopped the ravages of the disease. Improvements were also noted in patients having other forms of tuberculosis.

Reports of these preliminary studies, and the extravagant statements made in the press, touched off a blaze of popular enthusiasm. Despite the long lists of tubercular patients awaiting admission to our nation's hospitals, presumably responsible officials gave serious consideration to reducing facilities for the treatment of tuberculosis. In Congress, the House Appropriations Committee was sufficiently encouraged by reports of the new drug to cut \$313,000 from the funds provided to the Public Health Service.

Alarmed by these actions, the National Tuberculosis Association has pointed out that years may elapse before a complete evaluation can be made of the role this new form of chemotherapy may be expected to play in the treatment of tuberculosis. Among the vital questions still to be answered is that of bacterial resistance. Will tubercle bacilli develop a resistance to the new drugs, as they have to streptomycin? If they do, the danger is great that patients treated with the new drugs may develop a predominance of resistant organisms.

In the midst of the publicity and the warnings, has come a report by Dr. William Steenken, head of the Trudeau Tuberculosis Laboratory, where tests on the new drugs are under way. He reports that tubercle bacilli have developed resistance to the drugs as early as 26 days after the start of treatment. In one test with tuberculous patients, two-thirds of the group developed resistance to the drugs within eleven weeks, and

had bacterial counts as high as or higher than before treatment began. According to Dr. Steenken, one property of the drugs is to create a feeling of well-being and produce superficial symptoms of improvement, even when patients are actually undergoing bacterial relapse. Such patients, although they feel well, can easily spread the disease in its drug-resistant form. Researchers at the Trudeau laboratory concluded that the new drugs—when used alone—rated below streptomycin therapy in the treatment of tuberculosis.

The main task, obviously, is to develop some means of preventing germ resistance to the drugs, or at least to slow down the appearance of drug-resistant organisms. Further studies must also be made on toxicity, dosage, and relapse rates. Such researchers may take several years to bear fruit.

It must be emphasized further that the new drugs are not a preventive; they are simply another chemotherapeutic measure, and one whose ultimate value is still a matter of speculation. Despite the false hopes generated by a sensational press, the millennium is not yet at hand when the tuberculous patient can obtain a cure merely by swallowing a few pills each day.

All of you know that I am anxious to do all that I can for every patient but with these facts before you, we will proceed to supply the drug at cost but the purpose of this statement is to disillusionize patients who believe that a few pills can serve as a substitute for sanatorium treatment or who believe that any permanent results come from the use of any of the new drugs in the treatment of tuberculosis except when used in connection with surgery.

It is admitted by me personally as well as the members of the medical staff, relying upon the available information, that these drugs may bring about postponement of the inevitable but cannot prevent it.

Before you were born a physician doing tuberculosis work used a drug known as antiphymose. It happened to be normal salt solution. He told them that it could only be used in selected cases. He did not select his cases at all but alternately used such cases as came to him for treatment. A large number of these selected patients improved temporarily although they only received salt solution injections.

No one could be happier than I would be if we had a cure for tuberculosis in the form of a chemical or an antibiotic—Isonicotinic acid hydrazide, ISONIAZID, is a chemical, streptomycin

is an antibiotic—but it is distressing to me that medical science definitely takes the position that we have no such remedy now nor are we justified in the hope for any such remedy in the foreseeable future.

J. D. RILEY,
Superintendent.

June 10, 1952.

Arkansas Tuberculosis Sanatorium
State Sanatorium
Arkansas

Attention: Doctor J. D. Riley, Superintendent

Gentlemen:

Your letter of June 5th requesting information concerning the efficacy as well as the safety of isonicotinic acid hydrazide in the treatment of tuberculosis has been referred to this office for reply. The stamped envelope you have attached is returned herewith.

The Council has given consideration to the available evidence regarding the use of the new anti-tuberculosis agent, isonicotinic acid hydrazide and has adopted the shorter term, isoniazid, as a generic designation to identify this new drug that is marketed under various brand names as follows: Nydrizid (Squibb); Rimifon (Hoffman-La Roche); Niadrin (Endo); Ditubin (Schering); Pyridin (Nepera). The drug is considered of usefulness in the treatment of patients with tuberculosis, who have become resistant to streptomycin therapy. It is also considered to be of value in miliary tuberculosis and although it does not produce spectacular results, also in the management of tuberculous meningitis. Various brands of the drug have just been released for distribution in interstate commerce by the Food and Drug Administration, as you have indicated and while this release is primarily based upon evidence to indicate the safety of the drug for use in tuberculosis, it is also recognized that the drug has value as an adjunctive chemotherapeutic agent. The Council has voted to accept the Squibb brand and has under consideration other brands of the drug, which it is expected will be accepted in the near future, with the understanding that claims for use are presently restricted to streptomycin-resistant tuberculosis.

It is hoped these comments may be helpful to you.

Sincerely yours,

H. D. Kautz
H. D. Kautz, M. D.
Associate Secretary
Council on Pharmacy and Chemistry,
American Medical Association

Dr. J. D. Riley
Arkansas Tuberculosis Sanatorium
State Sanatorium
Arkansas

June 9, 1952.

Dear Dr. Riley:

The drug, isonicotinic acid hydrazide, has been released not only for institutional use but for general prescription use. The Food and Drug Administration makes no claims for its therapeutic effectiveness and, as you will note from the label, recommends that it be used with other drugs unless the patient's organisms are resistant to the other drugs.

Various reports were presented at our annual meeting in Boston recently and I believe the consensus was that therapeutically speaking streptomycin plus PAS was still superior to isoniazid but that little is known regarding treatment with combinations of streptomycin, PAS and isoniazid. Although resistance to isoniazid has been demonstrated several times in the laboratory and also in patients, the clinical significance of this resistance is not understood. However, most clinicians feel that isoniazid should not be given alone but should be given in combination with streptomycin plus PAS, except in unusual circumstances.

Sincerely yours,
Floyd M. Feldmann
Floyd M. Feldmann, M. D.
Assistant to the Managing Director
National Tuberculosis Association

PROCEEDINGS OF SOCIETIES

The Craighead-Poinsett County Medical Society was addressed June 4th at Jonesboro by Robert J. Mueller, Saint Louis, on "Psychosomatic Medicine."

J. H. McCurry, Secretary.

The Pulaski County Medical Society was addressed June 2nd by C. Rollins Hanlon, Saint Louis, "Surgery for Relief of Mitral Stenosis."

Edwin F. Gray, Secretary.

The Ninth Councilor District Medical Society met at Cave Springs June 6th for the following program: "Auria," Hugh Rives, Little Rock, and "Sterility," Eva F. Dodge, Little Rock. Officers elected are B. N. Saltzman, Mountain Home, President, and Preston Brogdon, Springdale, Secretary-Treasurer. The Society will next meet at Springdale, December 5th.

The Sebastian County Medical Society was addressed June 10th by Herman Flanagan on "The Neurosurgeon and Malignancy."

G. E. Simpson, Secretary.

President's Page

S. A. DRENNEN, M.D.
Stuttgart

Gentlemen:

May I again stress The Rural Health Program. The State Meeting will be held in Little Rock during August; you will be apprised of the exact date during July. For your information, I discussed the Program of Rural Health with gentlemen of other states at our recent A.M.A. Meeting and was agreeably surprised at the progress which is being made by these states. We, of our Organization, must cooperate to the fullest extent with our State Civic Organizations in the carrying out of this Program. In doing this we are furthering goodwill among our citizens and we, of the Medical Profession, need the good-will of our citizens now as never before.

I wish to again mention the American Medical Education Foundation. It was my pleasure to sit in the House of Delegates and listen to the fine report of this Committee. During that report a spokesman for the Radiologists of Chicago stepped up to the Speaker's Stand and submitted a check in the sum of \$2,000.00, the Chicago Medical Society \$25,000.00; one doctor his check for \$1,000.00 and the Illinois State Medical Society is taxing each member an extra \$20.00 which total amount will be \$250,000.00.

As I have told you before, our contribution will be voluntary—our only coercion used will be that of appealing to your sense of obligation toward our Medical School. May I reiterate that our Medical School received \$15,000.00 last year from this fund and I am sure we stand to get this amount raised this year. You, of your respective County Society will soon be apprised of our campaign. Won't you please contribute as much as \$25.00? You will not miss it as it is going for a good cause and remember you can earmark same for our own school.

In conclusion, may I call to your attention the Doctors Health and Accident Insurance that has been adopted by our Organization. This is a good, sound and economical policy and every doctor should take advantage of this protection.

YOUR PRESIDENT.

EDITORIAL

MODERN CHARITY: ASSEMBLY
LINE TYPE

Below is a rather long quotation from an editorial in The Journal of the Kansas Medical Society for August, 1951. It presents about two-thirds of the original and is difficult to condense further. The reasons expressed for its original publication are sufficiently cogent for us to reprint it in part:

Federated Fund Raising

Editor's Note: This editorial on a much discussed subject was prepared by request by a person experienced in fund raising campaigns.

There is a lot of talk these days about "federated" fund raising. If the issue hasn't been raised in your community as yet, it's a 100 to one shot that it will be, and you, more than likely, will be asked to express an opinion on how you feel about it.

The idea of the "federated drive" is based on the principle that all charitable, educational, and health agencies, which now raise their funds through separate and independent financial campaigns, could all be lumped together into a once-a-year, super-community chest which would raise enough money for everything and everybody. The proponents of this idea, aided, abetted, and encouraged by the National Council of Community Chests and Councils, point out that such a plan would (1) eliminate the so-called "bother" to the average business and professional man of being solicited for a worthy cause at every whip-stitch, and (2) that it would protect the relatively small group of public-spirited citizens in each community who are called to work on independent drives several times during the year.

The idea seems like a good one on first glance, but it is being questioned by an equally sincere group of citizens who feel that there may be more involved in the problem than meets the eye. The resistance movement is being headed for the most part by the "national voluntaries" which includes the Red Cross, the American Cancer Society, the National Foundation for Infantile Paralysis, and the National Tuberculosis Association.

Since the medical profession was primarily responsible for bringing into being at least three of these organizations, and since, as in the case of the American Cancer Society, at least half of the members of the governing boards are doc-

tors, it might be well to take a look at their point of view.

There are numerous reasons why these national organizations feel responsible for maintaining their separate identities in fund raising, the most important one being the devitalization of agency activity when they are required to join with many other organizations. It has been the experience of all these organizations that when fund raising responsibilities for any given cause is taken away from the agency, the interest in the cause disintegrates and the volunteers rapidly lose interest.

* * *

Another strong argument against the single, united fund campaign is that it cannot possibly include all the financial appeals which will arise during the course of a year. Most local communities have a community chest drive in the fall which raises money for local welfare and recreational needs. In addition, the polio drive in January, the Red Cross drive in March, and the Cancer Crusade in April, are the only appeals which are organized on a personal solicitation basis. Even if all these organizations were included in a federated drive, they would constitute only a small portion of the appeals which the average business man is called on to support. The various local organizations such as churches and youth groups would still be free to "bother" the business man for their own particular appeals for funds.

Therefore, any self-constituted group which attempts to organize an all-inclusive campaign faces a much greater responsibility than the relatively simple task of raising money. They virtually promise their constituency that no other requests for funds will be made. In making such a promise, they imply a control over the free choice of the people as to how, to whom, and when they can give of their means as an expression of their interest in a given cause or program. Most Americans believe that people should have the right to decide for themselves what they will give, and how much; and that no organization, no matter how wise and efficient it may be, should take upon itself the power to compel people to give other than in accordance with their own wishes.

* * *

Obviously there are two sides to this problem, and both sides are going to need patience and flexibility to reach an amicable agreement. We call these points to your attention in order that

you may be aware of some of the basic principles involved when you are called on to express an opinion or to be a member of a planning group in your community.

We have thought about this a good many times and cannot help being reminded of the old quotation: "The gift without the giver is bare,"—or words to that effect. It seems not too much different from taxation.—Journal, Indiana State Medical Association, October, 1951.

EDITORIAL

VOCATIONAL REHABILITATION

A review of the annual report of the Division of Vocational Rehabilitation, Department of Education, State of Arkansas, for the year 1950-1951 presents some interesting statistics. In this period, 1,018 cases were closed by the division as rehabilitated and 2,511 cases remained under service. Forty-four cases were closed but not employed and 10 cases were transferred to other states. Beginning with a total of 567 cases rehabilitated in the period 1946-1947, the total rehabilitations have steadily increased, showing an increase in 1950-1951 over 1949-1950 of nearly 200 cases. A total of 2,224 medical examinations and seven psychiatric examinations were made on these clients in the year; medical treatment was furnished 111 and surgical treatment to 262; hospitalization was provided for 285 and convalescent care for eight; prosthetic appliances were furnished to 547 cases. One hundred of the clients rehabilitated were receiving relief payments averaging \$603.20 per year. Of the 1,018 cases rehabilitated, 138 had never worked; 595 had had substantial employment and 285 had worked at part-time occupations. At the close of their training period these individuals were receiving wages from \$8 to \$38 per week and 80 were employed as farmers and 157 as family workers with wages not available, the latter two groups constituting 24 per cent of the total number of clients rehabilitated. The economic gain is manifest and encouraging as to opportunities inherent in a continuance of the program.

Relations between the Division of Vocational Rehabilitation, under the direction of Mr. A. S. Ross, director, his co-workers, and the medical profession in the state have been most cordial. An advisory committee functions for guidance in the medical aspects of the program and its various suggestions have received full support from the agency.

RANDOM THOUGHTS OF THE SECRETARY

May 24th. A pleasant afternoon ride with the Schaeffers to Hot Springs ahead of tomorrow's Council meeting and tonight to Coy's where steaks rating distinction are served.

May 25th. Strolling famous Central Avenue this morning meeting the genial Stough who does not take Sundays off; then with the Council which handles its agenda with dispatch and in post-session at Miller's where Jean Hundley gives an illuminating definition of "love"; homeward again stopping with the Crutchfields at Waldron where we recover our hat, the second time we have misplaced it this week.

June 6th. For the first time ever the Ninth Councilor District meets in one of its southern tier of counties, lately acquired, for this occasion at delightful Cave Springs, which needs more promises of roads than all the gubernatorial candidates can give * * * visiting shortly on departure with Cave Spring's beneficent E. J. Highfill, physically denied the pleasure of association with his colleagues as they gather just a couple of blocks away.

BOOK REVIEW

An Atlas of Normal Radiographic Anatomy: By Isadore Meschan, M.A., M.D., Professor and Head of the Department of Radiology, University of Arkansas School of Medicine. With the assistance of: R.M.F. Farrer-Meschan, M.B., B.S., (Melbourne, Australia). 593 pages, 1044 illustrations on 362 figures. Philadelphia and London: W. B. Saunders Company, 1951. Price \$15.00.

Meschan has compiled a compact text correlating normal anatomy, radiographic anatomy and proper positioning of the patient. The stated purpose is to make a convenient compendium of normal radiographic anatomy including: (1) basic morbid anatomy as it is applicable to radiography; (2) the manner in which the routine projections employed in radiography are obtained; (3) a concept of the film so obtained; (4) the anatomic parts best visualized on these views; (5) changes with growth and development; and (6) some of the more common variations of normal. These purposes have been attained in most commendable fashion.



TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

INCIDENCE OF PULMONARY TUBERCULOSIS AMONG EMPLOYEES IN 14 INSTITUTIONS FOR THE MENTALLY ILL

By Julius Katz, M.D., Robert E. Plunkett, M.D., and Frederick MacCurdy, M.D., *The Psychiatric Quarterly*, July, 1951.

A tuberculosis control program in the 27 institutions of the New York State Department of Mental Hygiene was inaugurated in the fall of 1941 with the X-ray examination of all patients and employees. These surveys disclosed hitherto unknown cases of pulmonary tuberculosis and resulted in patients with clinically significant pulmonary tuberculosis being segregated and employees with active tuberculosis being referred to tuberculosis hospitals.

To prevent the admission of unknown cases of tuberculosis among new patients and employees, routine X-ray examination of patients at the time of admission and of employees at the time of beginning employment was begun immediately after the initial survey. As a result, the pulmonary status of all patients and employees is now known.

The control program also includes X-ray re-surveys of all institutions at an interval of about four years. The periods between X-ray examinations in individual employees varied from a few weeks to almost five years. The frequency of X-ray examination of employees on the tuberculosis wards did not differ significantly from those on other wards.

Eleven of the institutions covered by this report are hospitals for mentally ill patients, while the three others are state schools for mental defectives. Ten of these have special wards or buildings for the care of tuberculous patients. The others transfer their tuberculous patients to institutions with tuberculosis wards.

Employees were considered as having newly developed pulmonary tuberculosis only when the X-ray film showed evidence of clinically significant tuberculosis following one or more previously negative films. These whose initial films were considered suspicious for reinfection tuberculosis, or for pleural effusion, were not included in this study. The diagnosis of tuberculosis was made by X-ray examination alone. Later study

during hospitalization in tuberculosis hospitals usually verified the diagnoses.

Employees were divided into two groups as follows: (1) Employees having four weeks or more total time on duty in a tuberculosis ward are considered as having been occupationally exposed to tuberculosis; (2) Employees on duty in wards or buildings in which there were no known cases of tuberculosis, or who had less than four weeks of exposure. During the period covered by this report, the average number of positions in the 11 institutions included was 9,996. These positions were filled by 22,072 individuals, for an average length of employment of 2.2 years.

Results

The incidence of pulmonary tuberculosis was higher among employees in the hospitals than among those in the state schools, 1.10 and 0.31 per 1,000 person-years respectively. There was no significant difference in the total rate between males and females. Among hospital employees the total incidence rate was 7.43 per 1,000 person-years among those working on the tuberculosis wards, as compared with 0.83 among those not exposed to known cases of tuberculosis among patients, a ratio of almost 9 to 1. The rate among exposed male employees was 11.35 per 1,000 person-years, that among the non-exposed 0.75. Among females the rates were 4.12 and 0.91 respectively. Thus, the rates were about 15 and five times as high, respectively, among males and females employed on the tuberculosis wards of the hospitals as among those not thus exposed. These differences are statistically significant. The rates among employees in the state schools were also higher among those occupationally exposed to tuberculosis, but the numbers are too small to be of statistical significance.

For the proper evaluation of the incidence rates, comparisons should be made to determine, first, whether tuberculosis incidence rates among those not employed on the tuberculosis wards are higher than among groups similarly employed, but among mentally normal patients, or in occupations considered to be free from tuber-

culosis hazard; second, whether the rates among employees on the tuberculosis wards are excessive as compared with groups caring for mentally normal tuberculous patients.

There is little information regarding the tuberculosis incidence rate in the general population. However, an estimate of this rate may be made from the number of cases of tuberculosis reported annually. While the cases reported in any given year do not necessarily represent those that develop during that year, nevertheless, over a period of time, it may be considered an approximation of the rate of development of new cases. The table shows the reported case rates per 1,000 population 15 years of age and older in upstate New York for the period which corresponds approximately to that during which the 14 institutions were surveyed:

1941	0.98
1942	1.16
1943	1.12
1944	1.00
1945	0.88
1946	1.00
1947	0.95
1948	0.95
<hr/>	
Average	1.00

The tuberculosis incidence rate of 0.72 per 1,000 person-years among all institutional employees not working on the tuberculosis wards compares favorably with the rates mentioned in other studies and in the general population, and indicates the absence of any unusual tuberculosis occupational hazard involved in the care of these mental patients.

It has been pointed out that employees, such as attendants and nurses, providing direct service to patients on the general wards had higher incidence rates than those providing less direct patient service, such as clerks, maintenance workers, and others. This would seem to contradict the statement that there is no unusual occupational hazard involved in the care of mental patients on these wards. There is, of course, danger of developing tuberculosis as the result of contact with patients among whom sporadic cases of infectious tuberculosis may develop which are not detected for some time. This is probably the cause of the higher rate among attendants and nurses. However, this danger is not limited to employees of mental institutions. In ANY group of employees, those whose occupation includes contact with tuberculous individuals will be expected to have higher incidence rates than those who are not subject to such

exposure. The fact that the TOTAL incidence rate for employees of these institutions is essentially the same as that obtained among other occupational groups indicates that there is no excessive occupational hazard among these employees.

The results of this study indicate that the phases of the tuberculosis control program in mental institutions which need emphasis are as follows: a. to decrease the relative number of employees exposed to tuberculous patients, the concentration of these patients in a few tuberculosis centers should be accelerated. b. Employees on tuberculosis wards should be kept under close medical observation with frequent, periodic chest X-ray examinations. c. Training in infectious disease techniques should be given to all nurses, attendants, and other employees working on tuberculosis wards.

PERSONALS AND NEWS ITEMS

W. A. Henry, Russellville, recently took special work in cardiology at Northwestern University.

"Surgical Training for the General Practitioner" by Randolph T. Smith, Little Rock, appeared in the June Southern Medical Journal.

N. B. Ellis, Wilson, was the subject of a feature article in the Blytheville Courier News on June 4th.

Eugene Crawley, Little Rock, has been elected vice-president of the University of Arkansas Alumni Association.

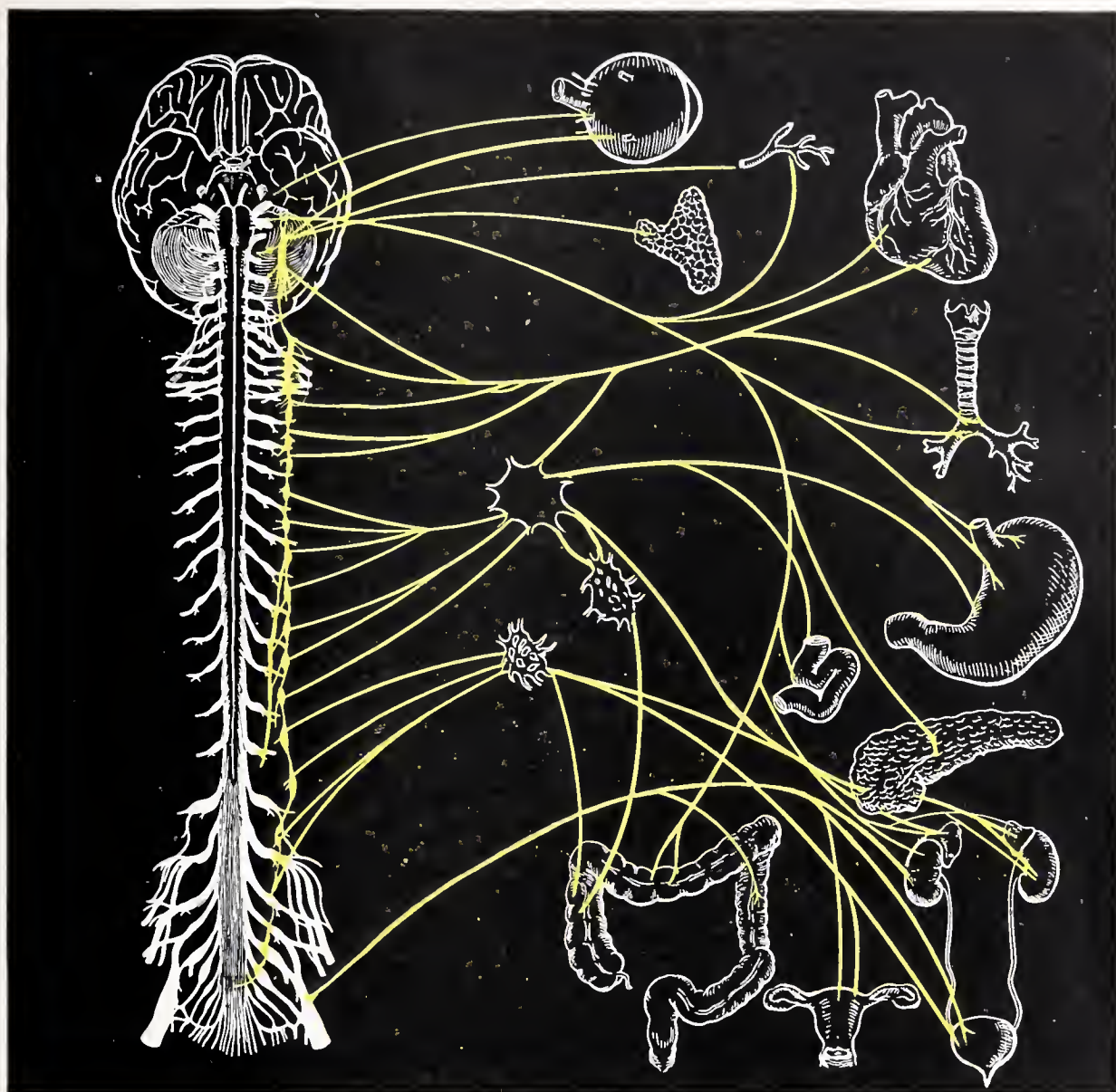
Dr. and Mrs. Harrison Butler, Fayetteville, spent a June vacation at Yellowstone National Park and other Western points.

Dr. and Mrs. Robert Watson, Little Rock, spent a recent vacation in Canada while Dr. Watson attended the meetings of the Harvey Cushing Neurological Society at Vancouver, B. C., and the Canadian Neurological Society in Banff, B. C.

D. A. Rhinehart and Pat Murphey, Little Rock, have been appointed emeritus professors of roentgenology and neurology, respectively, in the University of Arkansas School of Medicine.

Mac McLendon, has been elected surgeon of the Marianna post, American Legion.

Dr. and Mrs. Robert Thompson, Fort Smith, spent a June vacation in Florida.



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RESEARCH IN THE SERVICE OF MEDICINE

S E A R L E

PERSONALS AND NEWS ITEMS

Registered at the Chicago session of the American Medical Association were: Hoyt R. Allen, Little Rock; J. D. Ashley, Jr., Newport; J. W. Branch, Hope; Willis E. Brown, Little Rock; G. E. Cannon, Hope; O. H. Clopton, Rector; Geo. Coffey, Hot Springs National Park; Allen E. Cox, Helena; A. C. Curtis, Little Rock; S. A. Drennen, Stuttgart; E. J. Easley, Little Rock; D. W. Goldstein, Fort Smith; Vida H. Gordon, Little Rock; M. F. Heigden, Russellville; W. P. Kolb, Little Rock; T. H. Jones, Waldo; R. E. Lesh, Vincent O. Lesh, Fayetteville; Tom J. Meek, Camden; I. Meschan, Little Rock; Art B. Martin, Fort Smith; H. E. Murry, Texarkana; Gordon P. Oates, Little Rock; Fount Richardson, Fayetteville; R. B. Robins, Camden; Euclid M. Smith, Hot Springs National Park, and Jos. F. Shuffield, Little Rock. The executive secretary, Paul Schaefer, Fort Smith, attended the sessions. The annual Arkansas breakfast was held at the Palmer House June 12th.

Joe F. Rushton, Magnolia, recently addressed the Rotary Club of that city on the annual session of the Chamber of Commerce of the United States.

"Pernicious Anemia Complicated by Acute Granulocytic Leukemia" by R. W. Talley, J. E. Doherty and C. F. Shukers, Little Rock, appeared in the June Southern Medical Journal.

Dale Alford, Little Rock, attended the American Ophthalmological Society at Hot Springs Virginia, during June.

Neil Compton, Bentonville, spent a recent vacation in Florida.

Chas. S. Lane, Fort Smith, spent a recent vacation in Texas and Mississippi.

"A Method for Quick Immobilization of the Intrapancratic Portion of the Common Bile Duct" by L. P. Good, Texarkana, and P. E. Pemberton, Little Rock, appeared in The Journal of the International College of Surgeons, March, 1952.

D. W. Goldstein, G. E. Simpson, and W. R. Brooksher, Fort Smith, conducted a diagnostic cancer clinic at Charleston May 28th under the sponsorship of the Franklin County Medical So-

ciety and the Arkansas Division, American Cancer Society.

Virgil Payne, Pine Bluff, attended the recent meeting of the American Laryngological, Rhinological and Otological Society in Toronto.

"Office Proctology" by Hoyt R. Allen, Little Rock, appears in Modern Medicine, May, 1952.

WOMAN'S AUXILIARY NEWS

Mrs. Mason G. Lawson, 2nd Vice-President of the Woman's Auxiliary to the American Medical Association, and Mrs. Gordon P. Oates, President of the Woman's Auxiliary to the Arkansas Medical Society, attended the American Medical Association convention held in Chicago June 8-14.

At the monthly meeting of the Ladies Auxiliary to the Craighead-Poinsett Medical Society, held June 4th following a dinner with the Medical Society at the Country Club, Mrs. J. A. Tomlinson, of Arkansas State College, who was a guest, gave a delightful review of "A Man Called Peter," by Catherine Marshall. Ten members and four special guests, Mrs. Tomlinson, Mrs. F. H. Jones of Piggott, Mrs. Bob Cohen of Memphis, and Mrs. Yandel Johnson of Little Rock were present.

The Ouachita County Medical Auxiliary met at the Ouachita Hotel June 5 for a dinner meeting. Mrs. L. E. Drewery and Mrs. J. L. Dedman gave reports of the State Medical Convention held in April at Little Rock.

Committee chairmen were named and plans made for the coming year. The next meeting will be in September. Mrs. J. B. Jameson has been appointed Publicity Secretary.

The Pope-Yell County Medical Auxiliary met Thursday evening, June 12, at the Old South for a dinner meeting, with Mrs. Walter Harris and Mrs. Keith Hester as hostess. Thirteen members and one guest, Mrs. Kenneth Jones of Little Rock, were present. Mrs. Brooks Teeter, President, presided. A short business meeting followed. Plans were discussed to attend the Rural Health Conference to be held in Little Rock August 7 and 8. Mrs. L. Gardner, Mrs. J. Henry and Mrs. Ellis Gardner were appointed to serve as our Nurse Recruitment Committee.

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And Published Under Direction of the Council

W. R. BROOKSHER, M. D., Editor
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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

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OF THE ARKANSAS MEDICAL SOCIETY

PUBLISHED MONTHLY UNDER DIRECTION OF THE COUNCIL

Vol. XLIX

FORT SMITH, ARKANSAS, AUGUST, 1952

No. 3

A CONSIDERATION OF OBSTETRIC HEMORRHAGE†

ANDREW A. MARCHETTI, M. D., F. A. C. S.*
Washington, D. C.

"No circumstance that attends parturition, exposes women to so much danger, as profuse hemorrhages from the uterus, towards the latter end of pregnancy, and in the time of labor; . . .". These are the lines which open Edward Rigby's classic essay on uterine hemorrhage published in London one hundred and seventy-six years ago. Were Rigby living today, he inevitably would be impressed with the progress that the practice of midwifery has made since 1776. The dramatic reduction in maternal, fetal and neonatal mortality which has been achieved since his time indubitably would strike him forcibly. However, if he were to revise his essay today, there would be no need to change the introductory phrases in his first edition. Hemorrhage continues to expose parturient women to grave danger especially during delivery and the immediate postpartum period.

Hemorrhage, infection and the toxemias of pregnancy are responsible for approximately 90 per cent of all maternal deaths. Of this dreaded triad, C. A. Gordon of Brooklyn, who has devoted much time and care to the study and appraisal of maternal mortality in his community, has shown that hemorrhage directly and indirectly is the leader and most treacherous offender of all the causes of maternal deaths. According to the report from the National Office of Vital Statistics, there were 5,153 women who died in 1946 as the direct result of childbearing. Based upon current analyses of the causes of maternal mortality, particularly those of Gordon who states that from 30 to 35 per cent are the result of fatal blood loss, it may be inferred that in 1946 about 1,800 women succumbed to hemorrhage. The importance, therefore, of any consideration of obstetric bleeding is inescapable.

General Principles Applicable to the Problem

Before specifically commenting upon some of the causes and management of obstetric bleeding, it seems advisable to make several statements that may be applied to the problem in general.

The initial physical examination of an obstetric patient should be completed as early as possible in pregnancy and should be thorough. A urinalysis, hemoglobin and packed cell volume determinations, blood serology, blood typing and Rh factor determination should be the minimal requirements of the laboratory tests obtained at the outset. One should guard against anemia during pregnancy. Its general debilitating effect when superimposed by sudden and profuse hemorrhage can become rapidly fatal. Anemia is especially serious in grand multiparity and in women with a tendency to hypertension. Tennent and Starritt state that following premature separation of the normally implanted placenta previously anemic women are more disposed to renal failure. It is well to be reminded that all bleeding during pregnancy is not intrinsic. There are extrinsic lesions that must be considered, such as the cervicitides and vaginitides, polypi and carcinoma. Bleeding from these lesions is usually slight and intermittent. One should not hesitate to utilize the biopsy to rule out cancer under any circumstance. Specific treatment should be instituted for any of these extrinsic lesions after the diagnosis has been established.

The mortality resulting from obstetric hemorrhage is for the most part preventable. The basic principles that one should follow to combat hemorrhage in pregnancy are well suggested by Gordon in his survey on postpartum hemorrhage. First of all one should anticipate it when there are obvious reasons for doing so, and there is no better preparation at hand than a functioning venoclysis. Then prevent it, and finally when one is confronted with the actual bleeding phase of the complication, find the cause of it as soon as possible and check it while the blood loss is promptly being replaced by adequate blood transfusion. A parturient woman should be observed carefully in the delivery or recovery room at least an hour or until such time that her condition is considered safe for transfer to her own bed.

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For the successful outcome of treating the emergencies associated with hemorrhage, it takes teamwork. The day of individual heroics is passed. Improved facilities, the assistance of alert residents and nurses, antibacterial therapy, blood banks making the administration of blood readily available, prompt action and the earlier recognition for the need and the execution of surgical intervention are important factors that at the present time are having a telling effect upon the reduction of the deadly results springing from the hemorrhagic complications of childbearing.

It is not within the scope of this discussion to enumerate in detail all the known causes of obstetric bleeding and the manner in which treatment may be affected. Only the more common and more important entities will be considered with brief comments made upon their management.

Bleeding in the First Half of Pregnancy

Abortion—The loss of blood related to abortion is the most frequent cause of obstetric bleeding. Usually it does not prove to be as serious and as lethal as the bleeding which is encountered during the last half of gestation and the immediate postpartum period. The frequency of spontaneous abortion is estimated to be about 10 per cent of all pregnancies. The actual rate of criminally induced abortion can never be known.

On admission to the hospital, after the history and physical examination excluding the pelvis have been completed, one should be able to determine whether a case of abortion is induced or spontaneous, septic or nonseptic. It is our policy to follow this step immediately with a pelvic examination. We begin by inserting a sterile speculum into the vagina after the perineum has been cleansed and shaved. A thorough visual examination with the speculum promptly will produce valuable information. It will manifest the amount of blood, clots and what portion of the products of conception may be found in the vagina, it will show how much the cervix is dilated, whether there are products of conception protruding through it, and it will disclose the degree of bleeding coming from the uterus. This inspection may be followed by bimanual pelvic examination and then the decision can be made to institute definitive treatment. Unless the degree and extent of active bleeding warrants immediate exploration and evacuation of the uterine cavity, it is preferable to observe the patient for a period of 24 hours or more before determining whether operative measures are indicated. In the meantime, supportive treatment with antibacterial therapy administered therapeutically or prophy-

lactically is instituted and blood loss is replaced as it is indicated. The pregnant uterus is notoriously vulnerable to perforation. One should exercise gentle care when instrumental evacuation of the uterus is undertaken.

Ectopic Pregnancy—This is the next most frequent cause of bleeding in the first half of pregnancy. The amount of external bleeding that is noted with this lesion is relatively negligible when compared with the exsanguinating hemorrhages that may occur in the peritoneal cavity. It is a disease of diagnostic surprises, but the acute ectopic pregnancy as a rule is diagnosed readily. When it does become a problem of differential diagnosis, one should be cautioned that an explosive hemorrhagic emergency may be precipitated at any time during the period of study and observation. In any event, once the diagnosis of ectopic pregnancy is established, the treatment is immediately surgical and must be fortified by blood transfusions as they are needed preoperatively, during the operation and postoperatively.

Hydatidiform Mole—This is a far less common cause of bleeding in the earlier half of pregnancy. It should, however, be mentioned since it is an important cause and one that is often attended with serious blood loss. The approach to the treatment of hydatidiform mole should be conservative. Reproductive function need not be sacrificed for the fear of an ensuing malignancy. The occurrence of chorioepithelioma following mole is infrequent. Nevertheless, persistent bleeding following a mole especially in the presence of an enlarged, subinvolved, boggy uterus is serious. This type of bleeding is particularly serious if it persists three or four weeks after the patient has been discharged from the hospital. Nothing should be taken for granted under these circumstances. Readmission to the hospital and curettage are paramount. Malignant mole and chorioepithelioma are rare, but no physician wants to miss one.

Bleeding in the Second Half of Pregnancy

In the second half of pregnancy, it is universally recognized that placenta praevia and abruptio placentae are the two major causes of serious antepartum bleeding.

Placenta praevia—Because of the comparative prevalence of placenta praevia and the gravity with which it influences pregnancy and complicates delivery, one is lead to pronounce the following admonition. All women who experience painless bleeding during this period of pregnancy should be suspected of having placenta praevia and should be sent to a hospital at once without

having had a rectal or vaginal examination. In these cases, rectal examinations are not diagnostic and vaginal examinations, though informative, are extremely hazardous. Rarely, if ever, will a woman with placenta praevia bleed to death from the initial hemorrhage provided rectal or vaginal examinations have not been done.

The danger of placenta praevia is influenced by the following factors. The more dependent and least fixed segment of the placenta may be detached as the lower uterine segment thins out, lengthens and widens to accommodate the growing fetus. Acute blood loss frequently ensues while the fetus is still premature. Fetal malpositions, operative manipulations, the necessity for greater dilatation of the cervix, and the spongy, succulent lower segment contribute to a high incidence of rupture of the lower segment. Furthermore, the comparatively diminished contractility and increased vascularity of the lower uterine segment, accompanied by defective placental separation predisposes to postpartum hemorrhage. Finally, the propensity to puerperal infection is enhanced by the proximity of the placental site to the contaminated vagina, by operative manipulations, and by the uncorrected anemia resulting from excessive blood loss.

To be sure, bleeding near term could represent the "show" of early labor, or it could be a minor hemorrhage from a less serious extrinsic factor, or it could come from a ruptured marginal sinus of the placenta which in no way endangers the mother. But one should not take any chances, hospitalize the patient and make certain of the diagnosis. There is no hurry to confirm the diagnosis of a suspected placenta praevia once the patient is in the hospital. At any time during pregnancy, only profuse and continuous bleeding demands immediate and correct diagnosis and treatment. Overstreet and Traut have shown that in 95 per cent of women admitted to the hospital for antepartum bleeding in the last trimester of pregnancy, the bleeding will subside spontaneously within the first 24 hours of observation if one refrains from any early manipulation.

It is our policy, as it is with many other clinics, not to resort to a pelvic examination until several days have passed without further evidence of bleeding. This examination has for its objective the confirmation of a diagnosis and should be done in an operative delivery room with preparations organized for any necessity. Although it is realized that individualization must never be sacrificed, our treatment is governed basically by the current findings at the time the sterile vaginal examination is done in the operating room.

Vaginal delivery is elected when it is felt that not more than 20 per cent of the cervix at full dilatation will be covered by the overlying placenta. Rupture of the membranes is the procedure of choice in these cases, since it usually stops the bleeding and generally expedites the labor. Where it is indicated, the application of a Willett clamp to the fetal scalp and the use of intravenous pitocin prove to be of value. After the placenta has partially separated postpartum, it is best to complete its removal manually. Except in the lesser degrees of low implantation, postpartum expression of the placenta is not very successful. Caesarean section is indicated when the cervix is covered with 50 per cent or more of the overlying placenta. After a fetus is well within the status of viability, we also feel that Caesarean section is indicated in any patient with an abnormal presentation, particularly the transverse and breech, regardless of the extent of the placenta praevia. During Caesarean section one should avoid any careless or vehement manipulation while the extraction of the fetus and the removal of the placenta are accomplished. The lower uterine segment is just as subject to injury from above as it is from below. We have no use for a Vorhees bag in the management of placenta praevia. Version and extraction is tolerated only in the presence of a small dead baby where vaginal delivery seems indicated and compression of the placenta by the baby's trunk may reduce the amount of bleeding.

There are instances of diagnosed or suspected cases of placenta praevia in which prematurity jeopardizes the life of the fetus, but where a "waiting policy" in behalf of the infant is justified provided the mother can remain in the hospital under surveillance and no additional risk is imposed upon the mother.

Levity and indifference to bleeding, however slight, in the last trimester of pregnancy are grossly inexcusable. On the other hand, to assume an attitude of alarm over placenta praevia will lead one to hurried, unnecessary, and radical procedures which ultimately vitiate the welfare of the mother and the fetus. Adherence to the intelligent and alert management of these cases will establish in most instances an accurate diagnosis and thereby will direct one to treat each case in the manner most advantageous to the interests of the mother and the baby. Overstreet and Traut further pointed out from their experience with the conservative management of placenta praevia that although the diagnosis of placenta praevia among their patients was ultimately confirmed in 22 per

cent of them, only 3.8 per cent required definitive treatment in the first 24 hours.

Abruptio placenta — Premature separation of the normally implanted placenta, in our clinic, occurs with a little less than one-half of the frequency of placenta praevia.

The bleeding associated with abruptio may be external or concealed. The degree of separation may vary from minimal to total. When the bleeding is external, the blood is darker and contains more clotting than in placenta praevia. Whereas in placenta praevia the bleeding is painless, in abruptio placentae it is generally accompanied by pain which may vary from slight to severe and gradually or suddenly may develop and increase in severity. The toxemias are frequently concurrent, hence some refer to the toxic and nontoxic types of abruptio. The toxic type is more often found in the cases with concealed hemorrhage. The wide variation in the clinical and pathologic manifestations of abruptio placentae make it difficult to identify at times. Too often, a case has been classified as premature separation of the placenta without substantiated clinical and pathologic evidence.

The picture of the acute case of abruptio placentae is familiar to all of us and offers no difficulty in diagnosis. Intense abdominal pain, a boardlike tetanically contracted uterus, an expression of anxiety and restlessness, pallor, rapid pulse, and other signs of imminent, early or severe shock produces a pathognomonic picture of the condition. Unless the findings on pelvic examination fulfill the requirements for immediate vaginal delivery, Caesarean section in our experience is the procedure of choice, even in the presence of a dead baby. The longer the delay in the management of acute abruptio, the more severe the intoxication, and the more increased becomes the tendency to hemorrhagic diathesis and renal failure.

In suspected cases of this complication with external bleeding but without acute or typical signs and symptoms, observation and pelvic examination are essential to differentiate the condition from placenta praevia and other rarer causes. The choice of treatment will depend upon the condition of the patient, the amount and rate of blood loss, presentation, position and condition of the fetus, condition of the cervix and other associated abnormal factors. When it is decided that vaginal delivery is indicated and feasible, rupturing the membranes to initiate labor or expedite it, aiding the course of labor with intravenous pitocin, and immediate delivery by forceps or breech extraction at full dilatation in the baby's

behalf when necessary have proved to be helpful measures.

Let it be emphasized that in the management of placenta praevia and abruptio placentae, the postpartum period is as important and as critical as other periods were before the uterus was emptied. The most vigilant observation is paramount after the baby has been delivered. If bleeding persists and has not been controlled by uterine massage, intravenous oxytocics, and compression maneuvers such as Dickinson's while blood transfusions replace blood loss, resort to hysterectomy before it is too late.

The prognosis for the mother is five to six times more fatal in premature separation of the placenta than in placenta praevia, and for the infant it is approximately three to four times more fatal.

The Third Stage of Labor and Postpartum Hemorrhage

Brief comment on the third stage of labor inevitably projects the consideration of the most important and frequent contributor to obstetric loss of blood and maternal mortality, and that is postpartum hemorrhage. Many clinical investigators have stated that in this modern day there are still too many succumbing to postpartum hemorrhage. Of the women who die from all types of obstetric hemorrhage, the greatest number are lost in the postpartum period. This fact indicates that the third stage of labor is too frequently misunderstood and mismanaged.

Most hemorrhages occurring after delivery are the result of atony of the uterus, cervical and vaginal lacerations, and retained fragments of placenta. To follow Gordon's concept of the management of postpartum hemorrhage, the blood loss from uterine atony can be anticipated in the presence of overdistention of the uterus by such uncontrollable factors as a large baby, multiple pregnancy and polyhydramnios. One should be prepared to combat blood loss in every case of Caesarean section and should be ready to support the third stage of labor in cases of placenta praevia and abruptio placentae, in difficult labors and prolonged labors. In all of these instances, a functioning venoclysis is the insurance against delay when the need for the transfusion of blood suddenly rises.

Among the controllable and preventive factors, nitrous oxide-oxygen-ether anesthesia should be avoided in cases where hemorrhage is anticipated. One should watch episiotomy. It is a deceptive source of blood loss. Forceps delivery and breech extraction through an almost fully dilated cervix is traumatic and inexcusable. Severe cervical and

vaginal lacerations may be the consequence. The delivery of a baby whether spontaneous, or by forceps, or by breech extraction should never be hurried. Intravenous oxytocics should be used, but not repeatedly if the hemorrhage is not controlled initially by them. The Crede maneuver for the expression of the placenta should be avoided. If within a short period of time the placenta is not normally expressed, one should not wait too long to remove it manually particularly in the presence of abnormal bleeding. All placentae should be immediately inspected after delivery to determine that they are intact.

The combination of a firm fundus and an inordinate loss of blood that is bright red indicates that probably a laceration somewhere along the birth canal has been sustained. Darker blood comes from an atonic uterus or from one that is not contracting efficiently. Under these circumstances, the vagina and cervix should be promptly inspected with adequate assistance and instruments and there should be no hesitancy to explore carefully the uterine cavity. In any case, the source of the bleeding should be found as soon as possible and then checked as expeditiously as possible. If all other measures fail, one should resort to hysterectomy. In the ultimate analyses of postpartum hemorrhage, many authors have concluded that women who succumb to it, die two or more hours after delivery, and it is indicated that in many instances the loss of blood was underestimated and that transfusions were given too late and too few. The constant trickle that one watches for hours without effectively combatting it too frequently and too suddenly ends in irreversible shock and death.

Conclusion

When one considers all the advances that have been made in our specialty, none have contributed more in aiding us to combat the ravages of hemorrhage than our current knowledge and use of antibacterial therapy and the prompt availability of blood supplied from blood banks. Although our fight against hemorrhage is now formidable, it is far from complete. Let us be alert to the consequences of hemorrhage from the beginning of pregnancy to the end of the puerperium. Conditions, such as anemia, that will magnify its dire results should be corrected. Hemorrhage may be anticipated and prevented, let us be prepared for it. Finally, no one at any time should hesitate to seek the opinion and advice of a qualified consultant for any obstetric problem. This attitude is always a credit to one's judgment and in many instances will help to lower the still too numerous disastrous outcomes from hemorrhage.

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June 30, 1952.

Dear Alumnus:

Last month we pointed out that plans must be made for a meeting of the Annual Arkansas Medical Society Meeting. Those plans will go forward, but that is nearly a year from now. We need to develop our strength in numbers by joining the Alumni Association now. We need news items, letters and moral support from all Alumni now. We hope you will enter into this organization and give voice to your feelings in regards to the future medical education in the state and in its development now in order that you may benefit from your school and its facilities.

A school has lost sight of its ultimate goal if it fails to support its graduates in educational and consultation aids. We all have questions that should be answered by our medical school and its staff. The graduate also has an obligation to his school of supporting and molding its policies to meet developing needs and to correct existing weak points. We hope to accomplish both parts of this problem by developing a strong Alumni Association to give us a voice in these problems. Once again, every Arkansas Alumnus is urged to join and take an active part in the Arkansas Alumni Association. Contact me or Dusty Rhodes and help us develop a bigger and better school that will not have to give place to anyone.

Sincerely,

Eugene H. Crawley, M. D.



BLEATS BY A BLACK SHEEP*

BILL VAUGHAN†

It is very pleasant for me to be here with a Phi Beta Pi group. My association with the Phi Betes goes back a number of years. My father was a member of Mu chapter at Washington University, and sometimes when I was small I used to go over with him to the fraternity house on Sundays and have dinner. Among many other remarkable attributes he was the only man I ever knew who ate in a fraternity house when he could have eaten somewhere else.

Later on, when my brother joined the organization, I attended several social functions, and I notice a considerable change since those days some twenty years ago. Before dinner tonight martinis and things with cherries in them were being drunk. The Phi Betes I knew were all ethyl alcohol and fruit juice men. This diet of alcohol and fruit juice eventually gave the medical profession some of its greatest leaders and largest ulcers. I hope the dry martini can do the same.

I thought I might talk a bit here tonight about doctors. I know a lot of doctors. In fact, I personally maintain a large staff of them, principally for my family. My friends in the profession send me cigars and whisky every Christmas, then sit back and wait. I send them presents, too—subscriptions to the Reader's Digest. I want to be sure if they do get me they'll be up on the latest scientific advances.

We editorial writers have a slight complaint about doctors. They have been telling people how to vote. That's our racket. They ought to get over on their own side of the street. Of course, we are getting back at them. We are practicing medicine. Never has there been so much interest in medicine in the press. The picture magazine would rather run a spread of a brain operation in full color than of Jane Russell. It's a dull edition of the newspaper which doesn't have a new reducing diet. Or, if it can't come up with something as interesting as that, it may run today's cure for cancer. The initials ACTH show up almost as frequently as RFC.

Newspapers are interested in every phase of medicine, although they seem to be better informed on some phases than on others. It interests me for example, that when a baby is born in a taxicab, the headline always reads: "Loses Race with Stork." Editors are probably the only sizable

group of adults who think that's the way babies are born. Perhaps when I die I shall leave a million or so to establish chairs of obstetrics in schools of journalism.

I am here tonight, of course, in the role of a layman. I don't know why it is, I am always a layman, whether I am speaking to doctors, lawyers, architects, engineers, or almost anybody else. I remember once I was invited to speak to an association of rug and carpet jobbers and was intrigued to find that the program gave the title of my talk as, "A Lay View of the Rug and Carpet Industry."

The other day I went into a saloon to use the telephone and I overheard a customer asking for a martini and giving minute instructions—very dry, very cold, no olive. One bartender murmured to the other "That's the trouble with this profession—laymen trying to run it."

When the barbers put the price of a haircut up to a dollar and a quarter, I wrote some jocular comment about it and got a very stiff letter from a member of the tonsorial fraternity reminding me that professional fees were not suitable topics for comment in the lay press.

I grew up in a medical family, but I don't know that it made much impression on me, except that I developed a rather precocious ability to get the point of dirty jokes. Since I am the only male in several generations of our family to desert the medical profession, I am regarded as the black sheep. Believe me, being the black sheep as compared with a doctor is hard to do. I have argued against this interpretation, pointing out that we literary men were sitting at the head of the table when doctors were robbing graves, using the tradesman's entrance and clipping hair between patients. But, it hasn't done much good.

I started out to be a doctor. But in the second year of pre-med I ran into a snag. It was called qualitative and quantitative analysis. The first semester they gave me six little bottles and wanted to know what was in them. At first I thought the instructor was kidding. Hitler was grabbing power in Germany, unemployed men were walking the streets, and this guy wanted to know what was in six little bottles. Remember, he was the one who wanted to know, not me. I couldn't have cared less. Well, the only thing that made much sense to me was that lithium burned with a green flame, so I found lithium in everything. Fortunately, it was a very big year for lithium, and I got by.

As a reward, the next semester they gave me six more little bottles and wanted to know not only what, but how much of everything was in

*Talk made at the Founders' Day Banquet, Kansas City, March 1, 1951.

†Columnist, The Kansas City Star.

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them. I asked the instructor if he didn't think the whole thing was getting fantastic. But no, he wanted to know how much potassium and phosphorus—maybe even solium and irium—there was in those things. Well, about that time spring came to the campus, and the contrast between the inside of that lab and the coeds out there in the sunshine was unbelievable. I made the choice that any red-blooded young man who was obviously in the wrong place anyway would make. I went out and consoled the coeds while the rest of the dopes stayed in their burning lithium. Of course, all the girls later married wealthy doctors, but that's just one of those things.

One thing about doctors today is that they are mechanized. One came out to my house for a call and he adjusted all sorts of devices on his head in a kind of man from Mars helmet, and then he unreeled about twenty feet of light cord and said, "Plug me in." I did. Lights flashed on and off, and wheels went around. I'd like to say that bells rang, but I want to keep this strictly factual. But I will say that when he bent over to examine my wife's sinuses, a sign lit up across the seat of his pants saying "Tilt." He cured my wife all right, but he blew out three fuses.

But on with my message, which tonight has to do with this business of federal medicine. Most doctors, I think, are tired of the subject. They would rather practice medicine than join committees, make speeches and support Washington lobbies. You go to a doctor today and he hands you a stack of pamphlets on socialized medicine and says, "Read these, have all your teeth pulled out and come back in two weeks."

Unfortunately, most of the talking and writing on the subject occurs on the high policy levels, up above the clouds, where the American Medical Association and the fair dealers stand at Armageddon and battle for the Lord as they interpret him.

So I am going to talk as briefly as I can about how an ordinary, bill-paying and occasionally bill-owing patient feels about the matter. I hold no commission to speak for any group. My interest is in the kind of medical care that my family gets. If that could be improved by throwing the doctors to the social theorists I would say, however, reluctantly, "So long Doc, it's been good to know you."

I have done some writing and talking about the future of medicine in this country, and I can't say there has been any evidence that anyone was listening. I have tried to awaken the people to the dangers of socialized medicine after the fashion of a modern Paul Revere, but apparently the only

person who woke up was Oscar Ewing, who spent his time before a Washington committee recently explaining that what he was actually trying to do was save the American doctor from socialized medicine. I am afraid that some of us have misunderstood Oscar. Maybe we should apologize.

My position has always been that there were two important courses of action which would be most helpful in preserving our system of medical care. (1) To improve that care, through voluntary plans which will ease the financial load to the patient, and (2) to make this doctor-patient relationship we hear so much about a real, operative factor in the doctor's office instead of just something to orate about after dinners of this kind. These things, I think we all agree, are more important than the pamphlets and four-color posters being distributed.

Several excellent plans to help people pay their doctors have been developed. I have one more. It is based on the fact that it's no fun to pay for an operation or a long illness, especially after it is over and we feel good again and don't want to be reminded of unpleasant things, like doctors and hospitals. On the other hand, paying for new cars or household appliances or clothes doesn't seem to be any trouble at all.

Therefore, my suggestion is that medical care be tied up in a package price with something that people WANT badly enough to pay for it. When a woman comes in and sees you about delivering her baby, don't just sell her a baby, sell her a television set, too. The cost of the baby is less than the price of the television set. If both are put on one E-Z pay plan, the difference in the monthly payments due to the baby being thrown in, will be so slight as not to be even noticed by the patient.

The advantages here are many. In the first place, people are going to be enjoying Red Skelton so much they won't be inclined to blame you for the baby. Secondly, they are really getting their baby for nothing, since there isn't much difference in principle whether the cost of medical care is hidden in a TV installment or in a tax bill. Either way it's painless. Third, you'll be making money on the television set; maybe enough so you can reduce the obstetrical fees. It may be so profitable, in fact, that eventually you can give the babies away with the television sets. To make it kind of cute, boy babies would go with the sets that had outside aerials.

Another advantage is that this puts the doctor even with a man's other creditors. Heretofore, there wasn't anything a doctor could take back. He couldn't foreclose on the baby, or re-insert the

appendix. Under this plan he could threaten to take back the television set if the parents miss any payments.

Of course, this plan wouldn't be limited to maternity cases or television sets. Many a woman has a new fur coat while her husband still hasn't paid for his heart attack. The obvious answer is to put them all on one charge. The poor guy is going to suffer so much over paying for that coat, he won't even notice the little extra it has cost to get him healthy at the same time.

If you set a little boy's fractured leg, let his parents pay you while they are also buying a football and helmet from you. This not only has all the advantages outlined above, but who knows? He might even break another leg!

Some of you may object that this smacks of commercialism, that it might tend to destroy the warm personal relationship between doctor and patient. Yet, some of our warmest relationships are with the people who sell us things in the store. I have never had a doctor smile at me so winningly as the man who is selling me a refrigerator or a suit. These relations are warm. In fact, before the things are paid for, they are often downright hot.

I don't suppose the AMA is going to pay any attention to my plan. A very good editor once said to me. "You can't edit a paper by arithmetic." If you can't edit a paper by arithmetic, you can't practice medicine that way either, and you can't plan a nation's health program that way. Two and two doesn't always equal four when human beings are involved. If people are just numbers to you, then you can't treat their illnesses.

I'll never forget the young general practitioner in a little town in England who said to me, "The fun's gone out of it." He was practicing medicine by arithmetic. He had to. So many patients at so much a head, run them through, fill out the forms, and send them on to a specialist. "My father had time to practice medicine," he said, "I'm just a clerk."

Whether that was an excessively gloomy view of the British health scheme is neither here nor there, the important thing is that a doctor who has to practice by the numbers is going to have to be a remarkable man indeed to keep from growing apathetic. And when the zest, when the interest goes out of any job, it isn't going to be done well.

Why all the fuss about the doctors, some people ask. They're doing all right. When old doc drives up in front of my house his car is sometimes even bigger and newer than the plumber's.

Well, I DON'T particularly care about doctors. I know too many of them to think that they are any better than the ordinary run of mankind, although I'm convinced they aren't any worse either. It's just because doctors ARE like everybody else that I am concerned about what is done to the free practice of medicine. We're all bound up together.

You know, doctors get together and talk about something called "socialized medicine," and the newspaper editor may say: "Aw, what's eating those guys? All they do is tell me to quit smoking and drinking, then they lie about their golf games and ask me can I get them two tickets to 'South Pacific' and bang—I get a bill for 65 bucks. What do I care if they get socialized?"

Then the editors and publishers have a big banquet, and they get up and talk about something called "freedom of the press." The doctor just laughs and laughs because the paper spelled his name wrong in its report of the last medical meeting and announced some new drug as a "cure" for the common cold and, besides the boy always throws his paper in a puddle on rainy mornings. "Let the government take 'em over," he says, "It might improve 'em a little."

It's obvious that we are all against government control for ourselves but think it may not be too bad for the other fellow. A doctor who rents an apartment may be loud in warning the government to keep its long nose out of medicine, but he is going to roar like a wounded bull if rent control goes off. A landlord, oddly enough, may feel exactly the opposite about it.

What I am trying to say is that it's like the old story of being a little bit pregnant. Once the government by arithmetic takes over in one field of society, it has an amazing ability to spread. When we all become numbers in the files of a Department of Health, when doctors and patients become statistics instead of people, then we have surrendered on a very important segment of the front.

Two theories about socialism are in conflict right now. One is that it is like a nice little potted plant which may be set in the front window to brighten up the surroundings and make everybody happier. The other is that it's a plant, but there's no way to keep the thing from growing—that it keeps on growing and spreading until eventually it takes over the entire place. You are, of course, free to take either view you wish.

In their puzzled desperation these days the doctors have turned to something called "public relations" with all the childlike confidence of the Southern lady on the radio turning to Hadacol. It is an odd thing that medical men who have

nothing but contempt for shotgun medication—the pills which contains a little of this and a little of that on the theory that whatever your ailment it's bound to do you some good—think that shotgun public relations will cure all the varied symptoms of the fever for socialization of their profession.

Public relations, that magic phrase, is also a very much misunderstood phrase. Actually, public relations is not a contract between the American Medical Association and a firm of highly expert "consultants," I believe that is the currently popular word for press agents. It is not even what people as a whole think of doctors as a whole. Public relations is—simply—my doctor and myself.

That figure of fun to the sophisticated and adulation to the sentimental, Old Doc, was a master of public relations, although he never heard of the phrase. He made the doctor's profession highest in prestige of any in our country.

Now we wouldn't go back to Old Doc if we could. He probably killed as many people through ignorance as he warmed through the selfishness of his personality. The world moves, and it has passed up Old Doc. When we go in today to get our noses sprayed we don't particularly care whether we run into a folksy philosopher who will be a combination Dutch uncle and father confessor.

The fact remains, and is the central fact of this entire controversy, that I judge the medical profession by my doctor. When I turn to him in my panic at 2 o'clock in the morning, I want to know that my need comes ahead of his personal comfort. When I go to him, I want to go as a person in whom he is interested, rather than as a name on a filing card. I need his interest, his sympathy, as much as I do his medical skill. I am not speaking here for a soggy "bed side manner." I am speaking for warm sympathy.

In the course of my day's work I ordinarily read the editorial pages of the nation's newspapers, including those always fascinating barometers of public opinion, the Letters to the Editor. Often there appear from "Mother of Four" or "Old Subscriber" letters on the topic of socialized medicine. It is interesting to me to note that those letters which favor such a program almost always cite some personal irritation: a wait of two hours in the doctor's office, a refusal to answer a night call, an insufficiently explained charge for services. The angry letter writer has very obviously decided that he is for the government taking over the nation's medical care, not for any

clearly thought-out reason, but merely to get even with that smug, white-coated so-and-so.

That is one of the most amazing things about this whole campaign, both in this country and in England; its almost unbelievable undertone of bitterness, its punitive spirit. Who can blame the doctor for being dazed at what seems to be an atmosphere of personal hatred directed at him!

I found the same thing in England when I was there a little more than a year ago. It must be remembered that England had gone quite a ways along the road toward socialized medicine even before the present national health program became law. As a result, many English doctors accepted it rather placidly, even with some hopes that it might work out for the best. Today most of England's doctors are trying manfully to make the best of a sorry bargain. But even those who have been most friendly toward the socialized conceit were stunned, or expressed themselves so to me, by the contempt which was heaped upon them by Anuerin Bevan, then Minister of Health.

Mr. Bevan is a tremendously brilliant man, perhaps Winston Churchill's only match in debate. He is a Welsh coalminer who rose to power by sheer toughness of brain and physique. He HATES, there is no other word for it, the middle and professional class which he has referred to publicly as "vermin."

"These doctors," he is widely believed to have said at a formal dinner, "have been fighting me since I have been in office, and I warn them to look out, for it is my intention to reduce them to the poverty level." Whether or not he actually expressed himself as flatly as that, it is the sort of thing the doctors of England believe to be characteristic of his attitude toward them.

"He calls us for 'consultation,'" one of the leaders in the profession told me, "but what it amounts to is his telling us what we are going to do." Incidentally Bevan further baffled doctors by going to the hospital as a private patient. "Bad from the party standpoint, but I can't STAND the idea of a ward."

Perhaps the feeling is not so strong in this country, but I think most doctors do get an impression of vindictiveness. It must be hard for them to understand why, of all the groups in the nation they seem to be singled out for attack.

One would think that the medical profession had been derelict in its duty. The political science they taught us in school was that the people, that is, the state, take over those functions which private enterprise will not or cannot perform successfully. I think it is a concept with which few



Courtesy of New York Infirmary

Z HEM

Clinical Advantages

GENERAL PRACTICE

Arch. Phys. Therapy, June, 1944, Vol. XXV, pp. 357-362.

Am. J. Surg., Vol. LXXII, No. 2, p. 237.

Am. J. Surg., Vol. LXXXI, pp. 622
Rev. Gastroenterol., Vol. 15, pp.

GENERAL SURGERY

J. Int. Col. Surg., Vol. XII, No. 3.

Am. J. Surg., Vol. LXXX, No. 1, p. 112.

Arch. Phys. Therapy, Vol. XXIII, p. 551.

GYNECOLOGY:

Am. J. Surg., Vol. LV, No. 3, pp. 4

Am. J. Surg., Vol. LXXIV, No. 4, 443.

PEDIATRICS:

Exp. Med. & Surg., Vol. VIII, No.

Arch. of Phys. Therapy, Vol. XXV, 362.

OPHTHALMOLOGY

M. Clinics of N. A., May, 1940, N. pp. 723-732.

"Use of Hemo-Irradiation (Knott's) in Eye Infections" Presented before the Blood Irradiation Society, June

"There is a profound effect upon toxic patients with relief of toxic symptoms."

—From *J. Int. Col. Surg.*, May-June, 1949, Vol. XII, No. 3.

"The relatively rapid disappearance of all . . . symptoms of pneumonia due to a virus or virus-like organism seems significant."

—From: *Arch. of Phys. Therapy*, Vol. XXV, pp. 357-362.

"It is an outpatient treatment and also easily adaptable for bedside use if necessary."

—From: *Exp. Med. & Surg.*, Vol. VIII, No. 1, 1950, pp. 15-3

"Ultraviolet blood irradiation therapy is a practical method of reproducing bactericidal, detoxification, vaccine and vasodilatation effects and as such represents a valuable adjunct to the practice of medicine and surgery."

—From: "Ultraviolet Blood Irradiation Therapy" . . . *Archives of Physical Therapy*, Vol. XXIII, pp. 536-551.

Here is Your IRRADIATOR!

*"A valuable adjunct to
medicine and surgery"*

METHOD:

The Knott Hemo-Irradiator offers an effective method of applying radiant energy of selected wave lengths (between 2399-3900 a) to patient's blood.



HEMO-IRRADIATOR

RATIONALE:

Blood O_2 level raised.

—Am. J. M. Sc., No. 6, Vol. 197, p. 873.

Phagocytosis increased.

—Med. Physics, 1950, Vol. 2, p. 132.

Toxemia relieved.

—Am. J. Surg., Vol. LV, Na. 3, pp. 476-486.

—J. Int. Cal. Surg., Vol. XII, Na. 3.

Edema decreased.

—Am. J. Surg., Vol. LV, Na. 3, pp. 476-486.

—Am. J. Surg., Vol. LXXII, Na. 2, pp. 235-237;
Vol. LXXVIII, Na. 6, pp. 892-893.

INDICATIONS: Whenever a therapeutic advantage is suggested by the rationale.

TECHNIC:

The patient's blood is withdrawn by venipuncture and mixed with sodium citrate in a transfusion container.

The volume of blood to be irradiated approximates 1.5 cc. per pound of body weight. The citrated blood is immediately circulated through the Knott Hemo-

Irradiator, where it is exposed in the irradiation cell to the radiant energy emitted from a hot mercury vapor arc.

The irradiated blood returns in this continuous flow procedure to the patient through the same needle used for the withdrawal.

This method employs a closed surgical procedure. The time consumed for an average treatment approximates twenty minutes.

CONVENIENT ADMINISTRATION:

This procedure may be made available to patients in office, clinic or hospital.



Wm. Stever Co. INC.

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of us would quarrel. Therefore, when we hear the call for state medicine the supposition is that private medicine has failed. Yet we have no evidence.

On the contrary, out of the welter of statistics we can come to the conclusion that our national health is better than it ever has been. Certainly the personal experience of most of us, as we look around our family circles, is that in maternity and infant mortality, in the control of diseases which formerly scourged almost every home, in the extension of life span and in maintaining the happiness and usefulness of older persons, our strides have been almost unbelievable.

Still, we are told by the proponents of government medicine that this system of medical care, which has worked better than any in history, must be swept away and replaced by one which has never worked anywhere. It is like being asked to trade in the family car—which may, it is true, knock a bit occasionally—on a model which exists only in glowing advertisements and on which the price tag is a blank to be filled in at the salesman's leisure after the deal has been made.

I have friends, sincerely interested in this problem, who say "I am opposed to socialized medicine, but what's wrong with compulsory health insurance?" Indeed, if you were going to design the ideal political come-on, you would have a hard time finding anything more pat to your purposes than this conception of the painless extraction from your pay envelope of the money which will protect you against doctor and hospital bills. There is a lot of appeal in it, and that is why it will die hard if at all. People frightened by "socialized medicine" still are powerfully attracted by its supposedly distant cousin, compulsory health insurance. We can understand why they wonder what is wrong with it.

Several things, I think, are wrong with it. In the first place it will not correct the most serious present shortcomings of our present medical system: shortages of doctors, hospitals, and nurses. It does not build a hospital or educate a doctor. One reason that many British doctors voted in the British Medical Association plebiscite to approve the national health program was that they were promised more hospital beds. In particular they were promised health centers, buildings where several doctors might practice, share the services of technicians and the use of expensive equipment. The last I heard, ONE of these Centers had been built. In town after town across our country, free, private medicine is establishing more and more of such group clinics.

Compulsory health insurance will not get more

doctors into the rural areas where shortages present one of the serious problems of American medicine today. The so-called Kansas plan of the University of Kansas will do so, and is doing so. This plan, though it is a philosophy rather than a plan, is tremendously interesting. The state medical society, working with the university, is helping Kansas communities to help themselves to obtain doctors.

The result is amazing and reaches out into many areas other than medicine. Here is what can happen. The businessmen in a small town and the farmers from the surrounding area, say: "We have no doctor. Help us get one." The medical society and the university do help, but the town must see that the doctor will have a decent place to live, that he will have at least minimum facilities available. It has even resulted in the farmers coming in and giving their time to improve the streets, the merchants fixing up their stores, the people painting their houses—also it will be the sort of town where the doctor's wife will want to live and rear her family. It sounds fantastic, but it is happening, and it is coming from the people, not from the bureaucrats.

It probably would be unbearably old-fashioned of me to mention also that there is, or used to be anyway, something in the American spirit which finds the idea of compulsion repugnant. This preference for the voluntary way of doing things is undoubtedly purely personal prejudice on my part, and I won't press it.

Compulsory health insurance is not so objectionable in itself as it is in what it pretends. I am very much afraid that it would be the first step on a long, dark road. The editor of the British Medical Journal, a notably fair-minded man, who has done his best to smooth relations between the doctors and the government, said to me: "You know Morris Fishbein used to tell me that compulsory health insurance was the first step toward a full-time, salaried health service. I laughed at him. Now I know how right he was."

These things are progressive. In the disease of socialization, compulsory insurance is merely an initial symptom. England does not as yet have its doctors on full-time salaries as employees of the government. But slowly, inexorably, the tide is moving. The economic powers of the Ministry of Health are tremendous. Certainly the doctor still has a choice. He can remain outside the health service and expect patients, who are already paying for their medical care through taxes, to pay for it twice by coming to him just to pamper his stubborn refusal to bow to Whitehall. Or he can go into the health service, get

his pay of so much per head for patients whether he treats or mistreats, kills or cures, fill out the forms neatly and quit worrying.

As science progresses, as the treatment for disease becomes more elaborate, and more expensive, doctors must continue to take an interest in how their patients are going to pay for it all. If doctors are to avoid the hand of the government, they must constantly explore methods for extending voluntary pre-payment plans, for persuading young doctors to practice in rural areas, for disciplining those members of the profession whose fees lie beyond the bounds of economic reason. They must play a role in seeing that hospital charges are brought within reach of the average man.

I have not expatiated at great length upon the British experiment in this field for several reasons. For one thing, it is an entirely different sort of country than ours. The average Briton, moreover, has been accustomed to lower standards of medical care than we demand. In addition, it is still an experiment, with its final results not yet in sight.

I admire Mr. Oscar Ewing, who almost as soon as he landed in England, gave an interview in which he proclaimed that the scheme was working perfectly. I admire, almost equally, Mr. Harold Stassen, who nearly as quickly, announced that it wasn't working at all. The truth, as it so often must, lies somewhere between the two extremes, and is therefore less interesting than either.

Again, may I belabor a point which should be obvious? All these great issues we hear about eventually come down to personal relationships. How many strikes in industry, costing workers, management and the public, untold millions, have been caused by a surly foreman? Experts in labor relations field tell us that time after time they find that just such personal issues are at the bottom of it all.

Similarly, if the time ever comes when I must go into a voting booth and make my decision on free medicine or government medicine, I won't be thinking of statistics and Brookings Institute reports or Dingell plans. I'll be thinking of my doctor. If his golf game comes ahead of my family's need; if his receptionist's manicure comes ahead of common politeness—then, I (as an average voter) may be unreasonable.

That's where the answer to socialized medicine lies . . . in each doctor, in the extent to which he measures up to every American's ideal of his physician, as a person whom no federal bureau, however super-efficient, could ever replace.

EDITORIAL

THE CHICAGO SESSION OF THE AMERICAN MEDICAL ASSOCIATION

Over 14,000 physicians registered for the 101st annual session of the American Medical Association at Chicago June 9-13th. Scientific and technical exhibits and the scientific session were presented at Navy Pier. The Distinguished Service Award was received by Paul Dudley White of Boston. Among actions taken by the House of Delegates were disapproval of Section 3 of H. R. 7800, later passed by the Congress; postponement of action on the Truman Health Commission, a most controversial issue; a request to the Board of Trustees that a committee be appointed to study osteopathic education; approval of the proposed Constitutional amendment which would limit the taxing power of the Federal government; approval of a resolution favoring an amendment to the Constitution to prevent the adoption of any treaty which will conflict with the Constitution; abolishment of Fellowship in the American Medical Association with dues for 1953 placed at \$25, this to include a subscription to The Journal of the American Medical Association or to one of the specialty journals published by the American Medical Association; opposition to the formation of the board of microbiology since this would include those not doctors of medicine, similar opposition to a board of clinical psychologists; a resolution calling for no organized support of any political party or of any candidate for public office by members of the American Medical Association; directed a study of the Code of Ethics by the Committee on Constitution and By-Laws; announcement of gifts to the American Medical Education Foundation of \$10,000 from the Woman's Auxiliary to the American Medical Association; from physicians of Chicago and Illinois during this year of \$200,000 and the formation of a \$1,000 Club with a charter membership of eight to the Foundation. Edward J. McCormick was selected president-elect; L. H. Bauer, assumed the presidency; J. R. Reuling was elected speaker of the House of Delegates and Vincent Askey, vice-speaker. Annual sessions will be held in New York during June, 1953; in San Francisco during 1954; with interim sessions at Denver, December 2-5, 1953; at Saint Louis, December 1-4th, 1953 and at Miami in 1954. The annual Arkansas breakfast was attended by seventeen members. Jos. F. Shuffield, Little Rock, and S. A. Drennen, Stuttgart, acted as delegates.

President's Page

S. A. DRENNEN, M.D.
Stuttgart

July 19, 1952

Gentlemen:

I would like to further discuss in this letter The American Medical Education Foundation. The State Committee met in Little Rock July 13th for the purpose of working out the best method of putting over the Contribution Campaign. After detailed discussion, it was the consensus of opinion that each County Society, through its president and the committeeman from each District, contact each member for his contribution. I wish to make it quite clear that no assessment will be made either this year or next. This will be on a purely voluntary basis. We are appealing to your pride and public spiritedness to contribute principally to our own medical school because, as you have been told, your contribution can be earmarked for our own Medical School.

As I have before stated, many of you are graduates of our School and there will be in the future many of you who will have sons who will make this School their choice. I don't believe there is a member of our profession who desires to sit back and let the other states take care of our own job. You were told that last year we received the sum of \$15,000.00 for our School with only three contributions from our State. Let us not take the attitude of what shall I personally get out of it if I do contribute. Here is what we are going to get if we sit idly by—Federal money and with it the telling of how our schools are to be operated.

At the first hearing of Mr. Truman's hand-picked Health Commission, witnesses repeatedly stressed the need of more and more Federal funds. May I cite you what was and is being done by the doctors of Nebraska—Dr. L. D. McGuire, an Omaha physician, personally contributed \$1,000.00, then taking a one month's vacation rented an airplane to contact the doctors—the result: 94 contributions totaling \$17,775.00 or an average of \$157.00 in one month's time.

We cannot afford to sit idly by—for your information, twenty-two of our doctors contributed the sum of \$315.00 for the months of May and June. At this writing there are four more contributors whose amounts have not been submitted by National Headquarters. There are nearly 1,200 members of our Organization; 75% of this number should be willing to give \$25.00 a year (this contribution is deductible). Our Journal will give to you the names of contributors each month.

I know you gentlemen are not going to let us down on this proposition. Won't you please make your check payable to American Medical Educational Foundation. Please ear mark same for Medical School of your choice—send check to American Medical Education Foundation, American Medical Association, 535 N. Dearborn St., Chicago 10, Illinois. You gentlemen will each get in the near future "Medical Colleges In Vast Expansion," an enlightening story by Benjamin Fine, which will give you much food for thought.

YOUR PRESIDENT.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

EFFECT OF ISONIAZID ON THE PROGRAM OF THE TUBERCULOSIS ASSOCIATION

JAMES E. PERKINS, M. D.,
NTA Bulletin, July 1952

Some of the data concerning isoniazid may be summarized as follows:

Laboratory and Clinical Data. Isoniazid is an easily synthesized chemical which will cost little when released for sale on physicians' prescriptions; it is not patentable, and will be readily available. The drug has been found to be effective against tubercle bacilli in the test tube, and in tuberculous infections in experimental animals, even when there is delay in starting treatment. If treatment is discontinued too early in such experimental animals, relapses occur. Virulent tubercle bacilli have been grown from small, residual pulmonary lesions removed at autopsy of experimental animals, which apparently had recovered following treatment with the drug.

Isoniazid behaves well pharmacologically in man. When administered by mouth in suitable dosage, concentrations of the drug are obtained in the plasma and in the cerebrospinal fluid which are highly effective against virulent human bacilli in the test tube, and yet well below the level of toxicity in experimental animals. Increased appetite, gain in weight, and reduction of fever occurs frequently when patients with far advanced disease are treated with the drug. Changes in the X-ray picture have not been notable in patients with extensive tissue destruction. In cases of miliary tuberculosis, impressive improvement has occurred, including marked clearing in serial chest X-rays. The ultimate benefit in all types of patients awaits further experience.

Isoniazid appears to have advantages over streptomycin and PAS, because it is cheap and of low toxicity, because it is administered by mouth and does not irritate the gastrointestinal tract. From a therapeutic standpoint it may not prove to be markedly superior to the combination of streptomycin and PAS.

Public Health Aspects. The new drug is not a preventive, but only a better method of treatment of a patient who already has tuberculous disease. The effect of chemotherapeutic and antibiotic agents on the prevalence of tuberculosis cannot be

predicted from the rapid decline in prevalence of pneumococcal pneumonia following the development of effective chemotherapeutic and antibiotic agents against the pneumococcus. Pneumococcal pneumonia is an acute infection with severe symptoms and signs, and even without specific therapy usually terminates quickly in either death or recovery. Pulmonary tuberculosis is characterized by a symptomless onset, by the development of caseation necrosis and tissue destruction, by chronicity and relapses. Even a greatly improved drug is unlikely to exert a rapid effect on the prevalence of tuberculosis though it may accelerate control of tuberculosis used with other proved effective control measures. There seems to be no reason to assume that the new drug will change the nature of the control program more than did streptomycin and PAS.

There should be an intensification of case-finding procedures. The more effective the treatment of tuberculosis, the more reason we have for finding cases at an early stage. If effective therapy is available it should stimulate better cooperation of the public in case-finding programs.

There has been no reduction in the need for hospital beds for tuberculous patients but rather the reverse. The average duration of hospital stay has increased, not decreased. Although early cases may have a shorter stay in the hospital, other patients who would have died but for the improved treatment, remain longer. Furthermore, more extensive use of surgical procedures has resulted in greater, rather than fewer, demands upon hospital facilities. Finally, segregation of infectious tuberculous patients in hospitals is necessary to protect others. Many patients continue to be infectious despite prolonged treatment with the new drugs.

There has been no decrease in need for rehabilitation. Here, again, the possibility of shorter periods of hospitalization in early cases, thus reducing the rehabilitation problem, is balanced by the needs of the patients who suffer from a prolonged illness with ultimate recovery.

There has been no reason to decrease the program of research. Streptomycin and PAS, and

isoniazid, are not perfect drugs. Research must go on for even better ones. Furthermore, a good **vaccine**, superior to BCG, would have greater potentialities for control of tuberculosis than **any** method of **treatment**. Social and economic factors, including nutrition, still need study and definition as they relate to the tuberculosis problem.

There has been no reduction in the program of education. Essential to all aspects of the tuberculosis control program is an adequate program of education of the public and members of the medical and allied professions. The need for such an intensified educational program is more urgent in view of the distorted impressions concerning isoniazid acquired by millions of people through the premature sensational reports.

Possible adverse effect of new drug on tuberculosis control program. The new drug could actually prove a step backward if it is used indiscriminately with spread of tubercle bacilli resistant to the drug from these patients to others or if there is an unjustified decrease in funds for tuberculosis control programs with reduction of other effective methods of control.

Effect on program of the tuberculosis association. The comments thus far have applied to the tuberculosis control program as a whole. A consideration of the difference between the program of the voluntary agency and that of the official agency shows that with the exception of enforcement of laws and regulations, there is no aspect of the tuberculosis control program, which under appropriate local conditions, cannot be engaged in legitimately by the tuberculosis association, at least on a demonstration basis. The tuberculosis associations' special usefulness lies in the field of education, where the tuberculosis association can be particularly effective because it consists of medical and non-medical citizens working as volunteers. Hence, statements from these volunteers to their fellow citizens and their elected representatives carry greater weight than statements from employees of health departments. Tuberculosis associations, therefore, must assume the major role in preventing, on the one hand, misinterpretation of the part the new drug will play in the tuberculosis control program, and, on the other hand, seeing to it that improved methods of therapy are utilized as quickly as possible, within the limits of sound practice.

Some of the ways tuberculosis associations have assumed this role are as follows:

Authoritative statements on the current experimental and clinical evaluation of the drug are issued by the American Trudeau Society, which is the medical section of the NTA, and national,

state and local associations see that such statements reach promptly all those who need to be kept currently informed of technical progress. The tuberculosis associations must attempt to get necessary funds restored if a mistaken impression of the value of the new drug has resulted in unwarranted reductions in appropriation. Tuberculosis associations should keep the public currently informed of the true role of the new drug so that the public will support an intensification in the casefinding and other aspects of the tuberculosis control program.

PERSONALS AND NEWS ITEMS

W. B. Hawkins has been appointed chief of professional services at the North Little Rock Veterans Hospital.

S. N. Doane, Arkadelphia, has received the fifty-year pin and certificate as a graduate of Jefferson Medical College.

Ralph Hamilton has moved to his new office building in West Memphis.

Stewart M. Wilson has been elected director of the Lions Club at Rogers.

Dr. and Mrs. J. B. Stewart, Fort Smith, recently vacationed at Lake Hamilton.

"Some Observations in Nummular Dermatitis" by Ellis P. Cope, Little Rock, appeared in the Southern Medical Journal for July, 1952.

"Basic Principles of Cancer Practice" (a book on diagnosis, prognosis and treatment of human neoplasms), by Anderson Nettleship, Little Rock, has been published by The Williams and Wilkins Company.

Dr. and Mrs. Ken Thompson, Fort Smith, spent a recent vacation in Florida.

F. Q. Wyatt, Batesville, has been elected to fellowship in the International College of Surgeons.

Dr. and Mrs. E. Z. Hornberger, Fort Smith, spent a recent vacation in Wisconsin.

L. H. McDaniel, Tyronza, and H. King Wade, Hot Springs National Park, served as delegates to the Democratic National Convention in Chicago.

Robert F. Hyatt, Jr., Monticello, recently took special work in surgical technic at Cook County Hospital, Chicago.

The following contributed to the American Medical Education Foundation during May: George Burton, El Dorado; James F. Clark, El Dorado; A. R. Clowney, El Dorado; C. D. Cyphers, El Dorado; J. W. Dorman, Springdale; L. E. Fitch, El Dorado; John T. Gray, Jonesboro; W. H. Handley, Jr., El Dorado; John W. Harper, El Dorado; S. G. Jameson, Magnolia; C. E. Kennedy, Smackover; G. H. Landers, El Dorado; J. S. McKinney, El Dorado; B. L. Moore, El Dorado; J. J. Munn, El Dorado; W. S. Riley, El Dorado; J. B. Wharton, Sr., El Dorado; D. E. White, El Dorado and David Yocum, El Dorado.

G. D. Murphy, Jr., has been elected medicin of the El Dorado Voiture, Forty and Eight.

Dr. and Mrs. L. A. Whittaker, Fort Smith, spent a recent vacation in New Orleans.

C. Lewis Hyatt, Monticello, attended the recent session of the American College of Chest Physicians in Chicago.

Newly-located in Arkansas are the following physicians: Shelby Hicks, Lavaca; Duane Brothers, Ozark; Karr Shannon, Jr., Melbourne; R. T. Cook, Jr., Clarendon; Charles and Roger Edmisten, Huntsville; M. C. Edds, Mulberry; Ed Wheat, Springdale, and Robert Jones, Benton.

H. N. Rogers, Mena, has moved to a new office building.

J. T. May, formerly of Huntsville, has accepted a residency appointment in University Hospital, Little Rock.

Ross Van Pelt and Fred Smith, have leased the Carroll County Hospital at Eureka Springs.

G. D. Murphy, Jr., El Dorado, has been elected commander, Department of Arkansas, American Legion.

BORN—On June 6th, a daughter, Becky Lynn, to Dr. and Mrs. Wendall Ward, Little Rock.

RESOLUTION

July 2, 1952.

WHEREAS, on the 7th day of June, 1952, Dr. Charles S. Holt was called to his eternal rest, and

WHEREAS his forty-four years of residence and professional service in Fort Smith have been years of distinguished and unselfish service to the Society and to the community as a whole, it is therefore

RESOLVED, that the Sebastian County Medical Society, and the citizens of Fort Smith, have suffered an irreparable loss in the passing of our distinguished friend and fellow citizen, and be it further

RESOLVED, that this resolution be spread upon the minutes of the Society, and that a copy be sent to his widow.

Davis W. Goldstein, M. D.,
Chairman;

W. R. Brooksher, M. D.,
Walter G. Eberle, M. D.

RANDOM THOUGHTS OF THE SECRETARY

June 20th. With Schaefer as pilot in a Piper Cruiser across Oklahoma and Texas this day, and all day at that because of 40-mile head winds, landing on the worst air strip ever at Mount Pleasant, serviced at one of the finest terminals ever at Tyler, to Port Aransas, with visions of leaping silvery tarpon on the morrow.

June 21st. Initiated into some of the mysteries of fishing for tarpon, becoming acquainted with all of the tricks except catching and landing one for this full day, Schaefer forgetting the mission of the trip by landing one shark and one jack fish, the latter a job for a full day and if all tarpon fishing is like this and requires all the labor Paul put into getting that jack fish along side, it's a White River float next time.

June 22nd. With three other determined boats we set forth over the bounding main, and bounding it is all day, no fish, one hour's good sleep on the wave-tossed boat and the greatest fun of all coming back to harbor throwing bait to sea gulls who never miss.

June 23rd. With the blessings of tail winds and despite a contrary magneto and six failing spark plugs, Schaefer pilots the airplane to the home field in five hours over an air mileage of 545, uneventful except for crossing the Kiamichi Mountains where air turbulence is much like that on Corpus Christi Bay yesterday.

July 9th. With the Cooper Clinic in annual picnic session this night affording two would-be "teen-agers," one of whom is the woman who promised to "love, honor and obey" us, the opportunity to shampoo our dwindling hair with beer, a most unusual experience.

July 13th. With Schaefer piloting affording views of four thundershowers, none of which reached this drought section, attending meetings of the committees on the rural health conference and on medical education foundation with enthusiasm of the committee members most encouraging.

PROCEEDINGS OF SOCIETIES

The Fourth Annual Meeting of the Southwestern Surgical Congress will be held on the dates of October 20, 21 and 22, 1952, at the Baker Hotel, Dallas, Texas.

All physicians are cordially invited to attend. For further information please write to The Southwestern Surgical Congress, Central Office, 1227 Classen, Oklahoma City 3, Okla.

The Pope-Yell County Medical Society was addressed at Russellville July 10th by Frank Kumpuris and Alfred Kahn, Jr., Little Rock, on "Medical and Surgical Aspects of Vascular Disease."

William O. Young, Secretary.

The Arkansas chapters, American College of Surgeons and the Southwestern Surgical Congress, will meet at the Arlington Hotel, Hot Springs National Park, August 22nd, at 2:00 p. m. A cocktail party will follow the scientific program: John B. Good, Dallas, "Carcinoma of the Breast"; T. P. Foltz, Fort Smith, "Tumors of the Neck," and S. W. Hawkins, Fort Smith, "Acute Abdominal Emergencies."

WOMAN'S AUXILIARY NEWS

The Woman's Auxiliary to the Garland County Medical Society met May 19th, at the lake home of Mrs. Geo. Fletcher with Mrs. Paul Woods, Mrs. Freeman King and Mrs. James Leatherman as co-hostesses.

The meeting was called to order by our President, Mrs. H. King Wade, Jr., and reports of the State Convention were given by Mrs. Wade and Mrs. Atkinson. Mrs. Wade told us that Rural Health and Public Relations are the two things being stressed in this year's program. Mrs. Atkinson told us of the new approach being used in an effort to convey to the rural people the importance of improving sanitation and health conditions. Circulars using simple language and cartoons are being used for this purpose. Mrs. Wade thanked Mrs. John Dodson for preparing the attractive poster which was on display at the convention.

Mrs. Wade announced that the loan funds are to be paid in a lump sum this year, and that the luncheon meeting will be held in November, this year.

Mrs. Wade announced the following committee chairmen:

Program—Mrs. Homer Wright.
Health & Education—Mrs. J. Leatherman.
Membership—Mrs. Richard Daniels.
Public Relations—Mrs. Walter Klugh.
Finance—Mrs. Wm. Goodrum.
Civil Defense—Mrs. Harvey Lindsey.
Rural Health—Mrs. W. E. Gray.
Nurse Recruitment—Mrs. Frank Burton.
Research & Romance of Medicine—Mrs. Geo. Fletcher.
Legislation—Mrs. Chesnutt.
Exhibits—Mrs. John Dodson.
Decorations—Mrs. Chas. Lutterloh.
Luncheon—Mrs. Jack Wright.
Telephone—Mrs. O. H. King.
Doctors' Day—Mrs. Frank Adams.

Mrs. Wade announced that the South Central Branch of the American Urological Society will meet in Hot Springs in October and urged all of us to co-operate with the Medical Society as acting hosts.

A review of "The Physicians" by Hazel Lynn, was given by Mrs. Frank Burton, and was thoroughly enjoyed by all members and guests present.

A lovely picnic lunch was served by the hostesses following the meeting.

Mrs. T. M. Durham,
Recording Secretary.

The Southeast Medical Auxiliary met June 16 in the Methodist Church at Star City for a joint dinner meeting with the doctors. After dinner we adjourned to the lounge for a business meeting and social hour. Mrs. Louis Cohen of Little Rock was guest.

Mrs. Robert Dale.

The Woman's Auxiliary to the Pope-Yell County Medical Society met Thursday evening, July 10, in Mrs. Duran Summers' home. Mrs. Brooks Teeter, president, presided. Minutes of our June meeting were read and approved. It was voted that we take Nurse Recruitment as our chief project for this year, and that we start a definite program at our next meeting.

Plans were made for several members of our Auxiliary to attend the Rural Health Conference to be held in Little Rock, August 7 and 8.

There were 13 members and one visitor present.

Mrs. Max J. Mobley.

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Comparative Response to Common Methods of Therapy in Distal Colon Stasis*							
Number of Hours Residue is Retained							
	24	48	72	96	120	144	168
Control (No Therapy)				○ ○ ○	○ ○ ○ ○ ○ ○ ○ ○ ○ ○	○ ○ ○ ○ ○ ○ ○ ○ ○ ○	○ ○ ○
METAMUCIL	● ● ● ● ● ● ● ● ● ● ● ●	● ● ● ●	● ● ●	●	●		
Enemas	●	● ● ● ●	●	● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ●	● ● ● ● ● ●
Antispasmodics				● ● ● ● ● ●	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	● ● ● ● ● ●
Mineral Oil		●		● ● ● ● ● ●	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	● ● ● ● ● ●



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*Barowsky, H.: A Roentgenographic Evaluation of the Common Measures Employed in the Treatment of Colonic Stasis, Scientific Exhibit, National Gastroenterological Association, Chicago, Sept. 17-22, 1951.

RESEARCH IN THE SERVICE OF MEDICINE SEARLE

OBSERVATIONS RELATING TO THE USE OF GAMMA GLOBULIN IN PREVENTION OF PARALYTIC POLIOMYELITIS

Whether gamma globulin will be effective in the prevention of paralytic poliomyelitis is not now known. On the basis of animal experiments and preliminary study on humans, it is possible that globulin will have value in human poliomyelitis, but serious questions remain to be answered before such a hope can be substantiated. Nevertheless, public dissemination of information on the status and objectives of current studies, incompletely presented or misunderstood has created a serious demand for gamma globulin which cannot be met.

Virtually the entire output at current production rates is required to meet the demand for prevention or modification of the course of measles and infectious hepatitis.

Under the circumstances, it is obvious that the existing limited supply and current production of gamma globulin should be reserved for use in these diseases in which its efficacy has been established.

BOOK REVIEW

The Scalp in Health and Disease: By Howard T. Behrman, A. B., M. D., Assistant Clinical Professor of Dermatology, New York University Post-Graduate Medical School; Adjunct Dermatologist, Mount Sinai Hospital; Attending Dermatologist, Hillside Psychiatric Institute; Formerly Associate Dermatologist, Bellevue Hospital, and Assistant Attending Dermatologist, University Hospital; Fellow in Dermatology, New York Academy of Medicine; Member, Committee on Cosmetics, American Medical Association; Society of Cosmetic Chemists; Society for Investigative Dermatology; Fellow, American Academy of Dermatology; Diplomate, American Board of Dermatology. Saint Louis: C. V. Mosby Company, 1952.

This book with 312 illustrations goes into the anatomy, chemistry and physiology of the hair, also its endocrinology, anthropology and embryology, the diagnosis and treatment of its diseases, and the use and abuse of measures to alter its appearance. The present text goes into all these and many more matters in clear and useful fashion. It is plainly written and should be of interest to students, dermatologists and nondermatologists alike. It has many ready references, and with the great number of illustrations the dermatologist could easily have this as a ready reference book.

Current Therapy 1952—Latest Approved Methods of Treatment for the Practicing Physician. Editor: Howard F. Conn, M. D. Consulting Editors: M. Edward Davis, Vincent J. Derbes, Garfield G. Duncan, Hugh J. Jewett, William J. Kerr, Perrin H. Long, H. Houston Merritt, Paul A. O'Leary, Walter L. Palmer, Hobart A. Reimann, Cyrus C. Sturgis, Robert H. Williams. 849 pages. Philadelphia & London: W. B. Saunders Company, 1952. Price \$11.00.

This is becoming a most popular and useful text with its brief outline of recommended therapy. Where varying opinions exist among the contributors, these are given.

Arrangement is excellent and the style is readable throughout. This will be a valuable reference guide for the general practitioner.

A Textbook of Clinical Neurology—With an Introduction to the History of Neurology: By Israel S. Wechsler, M. D., Clinical Professor of Neurology, Columbia University, New York; Consulting Neurologist, The Mt. Sinai Hospital, Montefiore Hospital and Rockland State Hospital, New York. New 7th Edition. 801 pages with 179 figures. Philadelphia and London: W. B. Saunders Company, 1952. Price \$9.50.

This work has been a standard text of neurology for many years. The student, general practitioner, and specialist alike have found it to be one of the best "readable" presentations on the subject. The author's own inimitable style lends itself to a factual and concise presentation from a wealth of experience. The reader is not involved in trivial matters or controversial discussions—rather the whole subject is organized in such a way as to enable the reader to properly evaluate the myriad symptomatology and correlate this with disturbed function. One may object to the arrangement of sub-headings and question the inclusion of certain entities under a given heading, e. g., Alzheimer's and Pick's Diseases are listed under Cerebral Arteriosclerosis. The presumption is made that there is no need to include basic subjects, since we see no attempt to incorporate directly the embryological, anatomico-physiological, pathological foundations of neurology. Instead, these are distributed under the various nosological headings of diseases.

The new (7th) edition shows an attempt to delete obsolete, inaccurate material and bring to attention newer valid concepts. At the same time, the style is retained, and is indicative of the author's original thinking. The attention paid to differential diagnosis continues to be an outstanding feature which characterized the earlier editions.

New material includes electromyography, cerebral aneurysms and angiography, and the meningitides, in keeping with the more recent advances in diagnosis and treatment. Cerebral localization, of which much has been investigated in recent years, is almost ignored. The deletion can be explained by the author's apparent belief that this subject is better included in a treatise on neurosurgery. There are no references to utilization of ACTH or cortisone or of its action on the nervous system. However, the use of antibiotics, particularly streptomycin in tuberculous meningitis, is given its proper place in the armamentarium of drug therapy.

The author's handling of the chapters on dyskinesias and epilepsies is particularly good. He clarifies in these much of the former confusion that has existed, particularly in nomenclature and semantic representation. Some experts will object to the space devoted to psychological diagnosis and the neuroses; basic concepts are presented in such a manner that it may leave the student with the feeling that a complete and adequate coverage has been made. Others will accept these inclusions taking a more holistic approach, wishing to counteract any effort to support the artificial separation of mind and body. Dr. Wechsler reveals his motive to investigate THE WHOLE MAN rather than to focus on the total organic basis of disease.

This classic will continue to be a very useful text to all physicians. Despite some limitations present, it will give the reader a broad and comprehensive outlook in the study of the subject.

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The JOURNAL

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No. 4

DIAGNOSING YOUR PUBLIC RELATIONS

LAWRENCE W. REMBER

Director of Public Relations Field Service
American Medical Association

Sir William Osler said: "Let a patient talk long enough and he will give you the diagnosis."

This principle and approach is as soundly applicable to doctors in the diagnosing of their public relations ills as it is in the ascertainment of their patients' bodily ills.

Doctors and their county medical societies have applied the Osler technique—which incidentally is also the Gallup, Roper, Robinson opinion survey technique—in Decatur (Ill.), Toledo (O.), Oakland (Calif.), Utica (N. Y.), and Charlotte (N. C.). In doing so, they have come up with some very revealing answers as to how medical men rate with their patients.

The results of the five surveys mentioned have many lessons to teach to medical men and medical societies seeking to improve medical service and public relations in their own communities. The results apply even closer to home—to doctors' own offices and their very personalities.

It is not necessary to go into detail in each of the five surveys to get the picture of where doctors stand in their public relations. The findings of the Decatur survey conducted by the American Medical Association at the request of the Macon County Medical Society have been so astonishingly borne out by the other surveys mentioned that a case history analysis of it suggests reasonably well what parts of your public relations clothes are in fine durable shape and what parts need mending or replacement.

The Charlotte study, sponsored by the Mecklenburg County Medical Society, includes a 29.5 per cent Negro sample and also certain questions not asked in the other surveys. Its final results will be announced sometime this fall and should provide a valuable supplement to the Decatur findings.

Here are what the Decatur survey shows are the public relations strengths and weaknesses of doctors, their medical societies, and the health care which patients are receiving:

The purpose of the first basic question area was to find out to what extent medical care was available. The results showed that 91 per cent of the representative sample interviewed had a family doctor. Eighty-nine per cent had an occasion to see their doctor at least once within the year. Seventy-five per cent had used a specialist. Of these, 39 per cent did so on the recommendation of their family doctor, and 36 per cent selected specialists on their own, or upon recommendation of their friends, acquaintances, or by other means.

Eighty-eight per cent of the families expressing an opinion said that they were able to get a doctor to make a house call any time of the day or night when they needed him. Another 4 per cent said they could get him some times. There was a high correlation between those who said that they had a family doctor and those who said that they were able to get a doctor when they needed him.

The results showed that 63 per cent of the doctors respond to a home call right away; and that 29 per cent respond within a short time. Only 8 per cent respond with a long delay. One man enthusiastically said of his doctor: "He comes as soon as he can pull his pants over his pajamas."

The purpose of the second basic question area was to find out how the people felt about the cost of their medical, hospital, and drug care. Over twice as many people thought that surgical bills were too high as thought that office call and home call charges were too high (29% to 12%). Over three times as many, in fact, almost four times as many, felt that hospital and drug bills were too high as felt that office call and home call fees were too high (43.5% to 12%).

Forty-four per cent of those surveyed did not express an opinion on the cost of surgery, many saying that they had never had surgery. One out of every 14 persons volunteered the comment that he had never been hospitalized.

The purpose of the third basic question area was to find out what the people thought about the quality of their medical, surgical, hospital, and nursing care. Surgical care got over twice as many "excellent" votes as did hospital care or nursing care (51% to 21.5%), and nearly half

again as many as medical care (51% to 38%). Surgical care received 3 per cent "poor" votes, however, to none for medical care.

Hospital care and nursing care also fared the worst on the combined "fair" and "poor" votes, receiving almost three times as many as medical care (26.5% to 9%), and over twice as many as surgical care (26.5% to 10%). "Good" votes made up the remaining percentages.

The purpose of the fourth basic question area was to find out how many persons went out of town for medical care, and where, for what, and why. Seventy-nine per cent obtain their medical care entirely in Macon County. The 21 per cent who go elsewhere do so to see specialists or clinics primarily, and then only occasionally, as revealed by the "for what" and "why" answers.

Eighteen cities in all were named by the 63 out of 300 persons interviewed who reported that they had gone out of town for medical care. Twenty-five different ailments were mentioned as the cause for seeking medical care outside of Macon County. Eye problems were named by 17 persons, diagnosis by 12, surgery by 12, allergies by 4, clinical examinations 3 times, and 8 other ailments were mentioned two or one times each.

Six primary reasons were given for going out of town. Nineteen said going elsewhere was recommended by their Macon County doctor; 15 said that they knew the out-of-town doctor; 10 said they wanted a double-check; 8 said that there were better facilities elsewhere; 5 said their family made the recommendation; and 4 said their friends recommended the out-of-town doctor or clinic.

The purpose of the fifth basic question area was to find out what patients thought of their experiences in doctors' offices. Ninety-six per cent of the people thought that the secretaries, nurses, and technicians in their doctors' offices were courteous, and many added the word "very". The waiting time in doctors' offices did not fare so well. Only 78 per cent said that it was reasonable, and a number of these said it was "reasonable" only because "With the large number of patients my doctor has, I don't know what he can do about it." A number voting reasonable commented that their doctor "made appointments."

Ninety-three per cent felt that their own doctor had a personal interest in them. They were less sure that other doctors had a personal interest in their patients as individuals and as people. One person expressed the high favorable statistic well when she said: "I wouldn't go to a doctor unless he was interested in me."

The purpose of the sixth basic question area was to find out how many people were protected by prepaid hospital and medical care insurance, and whether they liked what they had. Eighty-one per cent of the families had some form of hospitalization insurance. A number of these also had some insurance for surgical bills, and to a much lesser degree for medical bills. Eighty-four per cent of those having health insurance were satisfied with the policies they had.

Health bill protection consisted of non-profit and commercial group and individual policies for hospitalization and surgical care, health and accident policies, and veterans and church policies. Of the 19 per cent who did not have health policies, only 3/10ths of 1 per cent did not know of their existence.

The purpose of the seventh basic question area was to find out what the people thought about doctors as citizens and as persons. Seventy-two per cent thought that their local doctors were very interested in making their community a better place to live. Twenty-two per cent said they were moderately interested. Six per cent said they were not interested.

Macon County citizens were asked: "Do you like doctors as people?" Ninety-four per cent said "yes". When the question was put, however, "Would you like to change them?", 29 per cent said they would do some remodeling. They mentioned most often that they would like doctors "less egotistical and independent," "less vague and more frank in explaining what was wrong," "less hurried in their examination and treatment," "less serious and less cold," "with more community interest," and "less autocratic."

The purpose of the eighth basic question area was to find out what the people knew about the Macon County Medical Society, and whether they felt favorably or unfavorably toward it as an organization. Almost two-thirds, or 64 per cent, of those interviewed were unable to name a single public service, or community service activity, of the Macon County Medical Society with which they were familiar. Fifty-five per cent said that they had not heard of the society or did not know enough to express an opinion about it. One woman said: "I've just been here six months. I came from France." She knew as much, or as little, about the local county society as many who lived in Decatur and surrounding area a lifetime.

Of the 45 per cent who had an opinion about the Macon County Medical Society, 89 per cent said they thought favorably of it. Three per cent

had a mixed attitude. Eight per cent felt unfavorably.

The purpose of the ninth basic question area was to find out what the people knew about the American Medical Association, and whether they felt favorably or unfavorably toward it as an organization. Eighty-two per cent had heard about the A.M.A. Almost half, or 47 per cent, however, said that they did not know enough about the A.M.A. to form an opinion. Of those expressing an opinion, 82 per cent felt favorably toward the A.M.A. Three per cent said they were neutral. Fifteen per cent said they felt unfavorably.

Analyzing the nine basic question areas as a whole, the medical profession can take justifiable pride in the many favorable responses. Percentages of approval running from 94 per cent to 71 per cent on the medical care, doctor, and doctor organization questions constitute a fine endorsement which another profession or trade or industry—and certainly government—would find difficult to equal.

It would be most unfortunate, however, if the high endorsement which the people of Decatur and Macon County expressed on most of the questions in this survey were to blot out the needs and opportunities for improvement of medical service and medical public relations which this survey also reveals.

The statistical answers show that on the 16 purely medical and surgical care, doctor, and medical society questions that percentages of disapproval ranged from 5.8 per cent to 29.1 per cent. Seven percentages of disapproval, by those expressing an opinion, were under 10 per cent; six were in the 10 to 20 per cent grouping; and three were in the over 20 per cent classification.

This is what happens when percentages of disapproval, by those interviewed, are translated into the 70,000 adults who live in Macon County:

- 3,300 adults in the county feel that the doctors have no interest in their community.
- 5,000 adults can't get a doctor in the county to make a house call.
- 5,100 adults feel that the quality of surgical care is fair or poor, and 6,400 adults feel that the quality of medical care is only fair.
- 7,000 adults in the county think that home call charges are too high and 7,700 believe that office call charges are too high.
- 11,200 adults in the county feel that surgical fees are too high.
- 15,400 adults in the county feel that waiting time in their doctors' offices is unreasonable.

—19,000 adults would like to change doctors as people.

—38,500 adults in the county do not know anything about, or do not know enough about, the Macon County Medical Society as a functioning organization to express an opinion about it.

Although on every question the percentage of complaint was in the minority, it is this minority that can make the noise of a trumpet. It is this minority percentage that needs to be reduced, and, if humanly possible, eliminated to the 4 per cent level that suveryists have found gripe about everything.

Part of the job is one of public education. Part of the job is one of correction within the profession. These should go hand in hand for most effective results.

NEW DESSERTS REMOVE EXCESS SALT

At the recent convention of the American Medical Association, visiting physicians made thousands of taste tests of cookies into which there had been baked a mixture of unflavored and finely ground sodium-removing resins. The doctors approved the medicated cookies for taste; many believed they compared favorably with grandma's best. Cookies are but one foodstuff into which the housewife may blend this new form of an already established agent which removes excess sodium from the bodies of patients who suffer from heart disease, cirrhosis of the liver, edema of pregnancy, or hypertension. Fruit juices, milk, fudge, cake, and flavored gelatin are some of the other nutriments which will hold and disguise the new medication. Now patients with excessive sodium retention can actually enjoy taking a medicine which allows other items in their diet to be seasoned more liberally and tastefully with once-forbidden salt. Eli Lilly and Company will supply physicians with books of various kitchen-tested recipes which may be given to patients.

Following its debut at the A.M.A. convention, "Carbo-Resin" (Sodium Removing Resins, Lilly), Unflavored, has been placed on the prescription market.

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Snook x-ray transformer with tilt table, Bucky diaphragm, flouroscope and additional equipment. Cheap.

DR. W. A. MOORE
Rogers, Arkansas

ALLERGY AND OTHER MEDICAL PROBLEMS IN OTOLARYNGOLOGY*

FRENCH K. HANSEL, M. D.
St. Louis

During recent years the introduction of allergic management and the use of histamine, nicotinic acid, the antihistamines, the antibiotics, ACTH and Cortisone and other agents has brought about radical changes in our concept of the treatment of various conditions encountered in the fields of Otolaryngology and Ophthalmology.

Because of a lack of understanding of the fundamental mechanisms of certain pathologic and functional conditions or a failure to make an accurate diagnosis, some type of surgical interference was, in previous times, not infrequently carried out in an attempt to cure or alleviate the patient's symptoms. This was especially true in cases of nasal and sinus allergy, headache and related phenomena. With the infectious conditions such as suppurative sinusitis, mastoiditis, and peritonsillar abscess, for example, surgical procedures offered the only satisfactory method of treatment, but today, however, this situation has been considerably modified by the use of the antibiotics, so in many instances, conservative rather than radical intervention is usually adequate.

History and Diagnosis: Before any type of therapy is employed, accurate diagnosis is always important. Every advantage should be taken of the diagnostic procedures which are available and adequate time should be spent in obtaining a complete clinical history and making a thorough routine examination of the patient. In as much as the problems under consideration are now predominantly of a medical nature, it is evident that adequate time must be allowed, for example, in the study of patients with allergic conditions, headache, vertigo, etc. More careful attention must be directed to previous treatment, especially as it applies to the administration of various drugs, nose drops, antibiotics, ACTH and Cortisone, in order to evaluate its effectiveness or recognize the occurrence of allergic or other undue reactions. This is particularly important when allergic reactions to aspirin, antihistamines, barbiturates, iodides, sulfones, ACTH, antibiotics, such as penicillin, aureomycin, streptomycin, and so forth, usually manifested as urticaria or a typical serum sickness have previously occurred. Furthermore, it is important to recognize disturbances of biotropic balance following the administration of antibiotics manifested, for example, by complicat-

ing fungus infection such as moniliasis of the mouth, pharynx, tracheo-bronchial tree and the lower intestinal tract. Evidence has been recently presented to indicate that certain types of hemolytic streptococci which are resistant to antibiotics may play a part in this disturbance of biotropic balance.

New drugs, biologic products, antibiotics and other therapeutic agents will come and go, but the complication of hypersensitivity to them, manifested chiefly by the serum disease pattern, will always remain a problem in therapy.

Laboratory Procedures: In the management of the various conditions encountered in the field of Otolaryngology, every advantage should be taken of those laboratory procedures which aid in diagnosis. Attention should be directed especially to the cytology of the secretions of the respiratory tract, the bacteriologic findings, including cultures for fungi, X-ray examinations of the sinuses and chest, pathologic examination of tissues, as well as examinations of the blood and urine when indicated.

Allergy and Infections: The treatment of allergy, infections or a combination of both in the respiratory tract is a daily problem in practice. Diagnosis is important and not infrequently a cytologic examination of the nasal sinus and bronchial secretions for the presence of eosinophiles and/or neutrophils may be the only reliable and definite method of establishing it. In many instances it may be a question of an exacerbation of allergy or a common cold. The patient should not be treated for infection when he has allergy and he should not be treated for allergy when he has an infection. In the extensive studies conducted on the use of the antihistamines in the treatment of the common cold this distinction was not made.

Although the administration of the antibiotics are of great value in the treatment of respiratory infections, their use is greatly abused. It seems that almost every patient who takes a common cold today demands penicillin or some other antibiotic for immediate relief. In most instances, antibiotics are not necessary as ordinary established methods of treatment are satisfactory. We have repeatedly encountered instances of penicillin reactions with severe urticaria and angioedema lasting for three or four weeks, in cases of the common cold which were not severe and which would have resolved in the usual period of time. Many unnecessary fatalities have occurred from the administration of antibiotics in individuals previously sensitized to them. A local reaction

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and especially urticaria following the first injection should be a warning against further administration. The most serious situation is that in which the patient develops fever and/or joint pains 7 to 10 days after the injections. If it is assumed that such a reaction represents an infection and the same antibiotic is administered again a fatal reaction may result. Furthermore the administration of ACTH for these serum disease symptoms is not without risk of further allergic reactions, for sensitivity to this hormone may occur. When the patient has serum disease he is in a state of hypersensitivity of high degree so other sensitivities are more likely to be added when other therapeutic agents are employed. These repeated insults may lead to irreversible vascular changes in the form of periarteritis nodosa. Since fever is likely to develop a diagnosis of infection may be made erroneously and an antibiotic administered. So more insult is added to injury and a fatal outcome is likely to result. In these cases, the presence of a high blood eosinophilia is a significant diagnostic feature.

Colds, Nose Drops, Antihistamines and Penicillin: The modern treatment of the common cold consists in the use of nose drops and the administration of antihistamines and antibiotics. In most instances the antihistamines or ephedrine compounds with or without antipyretics are adequate for symptomatic treatment. The use of nose drops of any type should be condemned for they are of insignificant value and their application is likely to be abused by the patient. The local applications of vasoconstrictor drugs causes a disturbance of the physiologic functions and produces a chemical irritation with resulting nasal obstruction, all of which interfere with the normal resolution of the cold and the drainage of the sinuses. Although the administration of the antibiotics may result in an abortion or an attenuation of the infection, secretions may be retained in the sinuses and lead to a new exacerbation of the infection soon thereafter. We have recently encountered a number of these situations in children. The history is that of colds which have persisted off and on all winter. After a course of nose drops, antihistamines and penicillin, the infection appears to subside, but nasal obstruction is persistent and there is still some discharge from the nose or nasopharynx. The use of the nose drops is continued and so the vicious circle develops. The secretions are retained in the sinuses, chiefly the antrums, and a reinfection develops with the slightest provocation. The second round of antibiotics does not seem to be as effective as the first because nothing

has been done to establish sinus drainage by suction, displacement or irrigation.

At this point the answer to the problem consists in the discontinuation of the use of nose drops and the internal administration of ephedrine or any of its synthetic compounds for relief of the nasal obstruction. The sinus secretions should be evacuated every 1 or 2 days and this can usually be accomplished satisfactorily with simple suction. In some instances, displacement may be employed and some antibiotic solution introduced. If the sinusitis has not responded satisfactorily after a few treatments, a mild course of parenteral antibiotic therapy is also necessary.

The Treatment of Allergic Conditions: In the field of Otolaryngology, those allergic conditions which are usually encountered consist of nasal and sinus manifestations, hay fever, dermatitis of the ear canal, auricle and surrounding areas, and possibly urticarial reactions from antibiotics. In the eye, allergy is usually manifested as conjunctivitis, marginal blepharitis and periorbital dermatitis.

When etiologic factors can not be eliminated or avoided, some type of injection therapy is usually necessary, such as that which concerns, house dust, animal danders and other inhalants, and pollens. For dermatitis involving the auricular and ocular regions, staphylococcus toxoid and extracts of the pathogenic molds such as trichophyton, oidiumycin and epidermophyton are very effective in producing satisfactory results. Small doses of staphylococcus toxoid are also very effective in the treatment of furunculosis and styes.

In injection therapy, we follow the plan of using small optimum doses which are maintained at the effective point without further increase. The dilutions employed for house dust for example range from 1-100,000 to 1-10,000,000,000 and for pollens from 1-100,000 to 1-10,000,000. Staphylococcus toxoid is most effective within the dosage range of from 1/10 to 1 unit, and the pathogenic molds in dilutions of 1-1,000,000 to 1-100,000,000.

Vascular Headaches and Related Phenomena

The treatment of headaches from the standpoint of the Otolaryngologist before the introduction of histamine, nicotinic acid and the ergot compounds was a most discouraging problem. Often some type of surgical procedure was followed in an attempt to relieve the patient. True sinusitis accounted for the cause in only a small percentage of cases. The type of so-called sinus headache which is confined to the frontal, antrum, temporal and ocular regions, associated with lachrymation, sweating of the forehead and a stuffy

nose on the affected side is now recognized as histaminic cephalgia.

Meniere's disease and certain cases of tinnitus and deafness are now recognized as vascular phenomena.

More recently we have encountered a variety of unclassified cases in which pain or some form of discomfort is referred to the teeth, the cheek, the parotid region, the pharynx, the larynx or the posterior cervical regions which appear to be of vascular origin and in which most satisfactory results were obtained from histamine therapy, employing dosages within the range of 1-1,000,000 to 1-100,000,000 twice weekly.

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EDITORIAL

BLUE CROSS-BLUE SHIELD BENEFITS

Faced with rising hospital costs, Arkansas Medical and Hospital Service has been forced to place into effect an increase in overall rates effective July 1. This increase in rates has been accompanied by additional allowances to subscribers. Among the new benefits which have been provided subscribers are hospital allowance increased to seven dollars per day, payment for all drugs up to \$25 with a 50% allowance for all drugs in excess of \$25 (blood and plasma excluded); 50% of all charges for x-ray services (to hospitalized patients); an increase in indemnities of more than 40 Blue Shield schedules and x-ray therapy allowances when used alone or in conjunction with surgical or medical service. More complete information may be obtained from the office of the Arkansas Medical and Hospital Service, Little Rock. Members are urged to familiarize themselves with the new benefits in order that they may properly advise their patients.

J. J. MONFORT NEW SECRETARY

At a meeting of the council in Hot Springs August 24 J. J. Monfort of Batesville was elected Secretary succeeding W. R. Brooksher resigned. Hugh Edwards of Searcy, formerly Vice Councilor of the Second District, moved up to fill Monfort's former office as Councilor.

THE USE OF ARTIFICIAL RADIO-ISOTOPES AS X-RAY AND RADIUM SUBSTITUTES IN RADIATION THERAPY: A REVIEW*

ISADORE MESCHAN, M. D.
Little Rock

Since the turn of the century, x-rays and radium have been used widely in medical treatment. Tremendous amounts of scientific and clinical data have been gathered relating to their use. In the past ten years, however, many substitutes have been found for x-rays and radium amongst the radioisotopes made available through the Atomic Energy program—and now there is a substitute for radium in its every use, and there are several potential substitutes for high voltage and super-voltage x-rays. Indeed, Hahn has made the statement that if radium were discovered in our present day with our full knowledge and availability of all of the radioactive isotopes which are now available, that very likely radium would never be utilized in the treatment of disease.

The various uses of high voltage x-rays and radium can be listed as follows:

- 1) External deep irradiation from a distance.
- 2) External deep irradiation from close range.
- 3) Interstitial irradiation by implantation of either removable or non-removable sources.
- 4) Intracavitary irradiation such as irradiation per vagina.
- 5) External very superficial radiation, such as the beta ray radiation from a radon bulb.
- 6) Whole body spray radiation.

Apart from the high cost of radium and super-voltage x-rays there are other disadvantages in their use:

1) When the beta particles from radium are desired, the radium or radon must be used in relatively unfiltered state. About 40% of the emanation under these circumstances is very penetrating gamma radiation, and protection for personnel is difficult and quite unsatisfactory.

2) If radon is desired in any form, its procurement is carried out at great expense, immobilizing large amounts of expensive radium, and protection from this radioactive gas is doubly hazardous.

3) If the gamma radiation from radium or radon is desired, the alpha and beta rays require considerable filtration in the form of expensive metals such as gold or platinum. If there be a leak in this container, the use of the element is doubly dangerous because of radon gas leakage.

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and lack of radioactive equilibrium within the container making standardization of the source impossible and erroneous.

4) Because of the great cost of radium the use of large amounts of this element is prohibitive not only from the standpoint of treatment from a distance (telecurie therapy), but also from the standpoint of implantation of large areas in a number of patients.

5) There is very little flexibility in the use of radium needles.

6) If radium by any chance is absorbed or ingested it is extremely toxic, causing considerable bone damage, osteomyelitis, sarcoma, and death.

These considerations have fostered the development of the substitutes for x-ray and radium amongst the artificial radioisotopes. The most important of these from the practical standpoint to date are as follows:

1) Cobalt 60, which has been used as a radium and supervoltage x-ray substitute in every way except in non-removable implants, is cheap and quite readily available. From the standpoint of treatment from a distance (telecurie therapy) it is highly probable, however, that cesium 137 will be found to be even more advantageous in view of the longer half-life of cesium 137.

2) Radioactive colloidal gold (198), has been used as a substitute for the non-removable radon seeds, and has considerable advantage over the latter, being a diffusible agent rather than a metallic seed.

3) Radioactive iodine 131 has been used particularly in the treatment of thyroid disorders. Apart from its therapeutic application there are additional tracer diagnostic applications in thyroid disease and brain tumors, for which there is no X-ray or radium counterpart.

4) Radioactive phosphorus 32 has been used as an X-ray substitute in the treatment of polycythemia vera and the leukemias particularly; and also as a tracer diagnostic substance in brain tumors, mammary tumors, etc.

5) Radioactive strontium (strontium 90) has been used as a pure beta ray emitter, and thus is a substitute for the radon glass bulb source in the treatment of certain conjunctival lesions and other eye lesions.

Now allow me to consider each of these isotopes in brief summary in more detail.

Cobalt 60 Utilized as a Telecurie Agent. It is now possible to obtain cobalt 60 in very small sources of extremely high activity, and therefore it is possible to place these sources within suitable protective devices so that the source contained

within this protective device can act as a tube head, irradiating tissue from a distance. An apparatus has been devised and is already in use in at least three institutions, in which a treatment distance is achieved of 70 to 100 cm. For one of these telecobalt units the dosage rate at 70 cm. can be 100 roentgens per minute if desired. However, smaller dosage rates can be achieved by merely using smaller sources. Presently available depth dose data would indicate that depth doses of approximately 55 per cent can be achieved at 10 cm. depths beneath the skin, and at 15 cm., doses approaching 40 per cent can be achieved for conventional field sizes. Actually, the depth dose obtainable with cobalt 60 radiation is definitely higher than that reported for two million volt X-ray radiation. The depth dose measurements made for the telecobalt units now available approximate a three million volt X-ray irradiation unit for a focal skin distance of 70 cm. and a 10 x 10 cm. field.

It is thus obvious that a highly efficient source for supervoltage therapy is available, whose only disadvantage is the fact that with a half-life of 5.3 years the initial intensity will be significantly reduced in a relatively short period of time.

A newer isotope has been studied from the standpoint of overcoming this main disadvantage, namely cesium 137. Cesium 137 is a fission product obtained from uranium, and since uranium is now being utilized in large quantities in the manufacture of the atomic bomb, there are very considerable quantities of these fission products now available. Already small quantities of cesium 137 have been extracted in relatively pure form from these fission products, and it is predicted that cesium 137 can be made available for this same type of telecurie therapy apparatus. The advantage of cesium 137 will be that it has a half-life of 33 years, and therefore will not require replacement in a single generation. It has one slight disadvantage over cobalt 60, namely, that the gamma ray energy is somewhat less; but nevertheless it will be the equivalent of a one million volt X-ray unit, and therefore should be sufficient for all needs with regard to a supervoltage X-ray therapy unit in the million volt range.

Utilization of Cobalt 60 as an Interstitial or Intracavitary Source. During the past three years we have been intensely interested in developing the utilization of cobalt 60 as a substitute for radium in interstitial and intracavitary applications. We have now made available cobalt 60 wire encased in hyperchrome steel which can be pro-

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RITTER TYPE 2 "UNIVERSAL" TABLE

Ritter equipment is an everyday necessity that pays big dividends in patient prestige, time and energy saving features, and intangibles that assure professional leadership.

It is possible, however, to predict with reasonable certainty how this investment will amortize itself over a normal period of ten years.

The attached sheet gives examples of tax savings (based on 1952 rates) for an investment in a Ritter Type 2 "Universal" Table or a Ritter ENT Outfit.

FOR EXAMPLE: A married man in the \$15,000.00 a year net taxable income bracket normally would pay \$4,052.00 income tax.

By investing in a Ritter Type 2 "Universal" Table at \$1,253.00 and depreciating it at 10% a year, he pays only \$4,009.00 tax; a net saving of \$42.60 per year. In 10 years his investment is not \$1,253.00 but \$827.00.

After ten years the Table is fully depreciated, and he can then dispose of it and invest in a current model of that time.

At age ten years, he can resell any item of Ritter equipment for a minimum of 40% of the original cost; by so doing he realizes \$501.20, so his investment now amounts to only \$325.80.

He has had the use of the Table for only \$23.58 per year which, if classed as rent, would amount to only \$2.72 per month. Here is an investment that really pays off!

In addition, if he purchased the Table on the "RITTER DEFERRED INVESTMENT PLAN," the interest paid is also deductible on income tax for the first 3 years.

T
Ritter MA
Ritter MB
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FOR THE LUXURY"

PURCHASE OF

\$1,213.00

878.00

182.00

79.00

\$2,352.00

ear, \$235.20



BASED ON 1952 RATES

EXPAYER STATUS	Level of Taxable Net Income				
	\$5,000.00	\$10,000.00	\$15,000.00	\$20,000.00	\$35,000.00
—No Equipment.....	1,134.00	2,452.00	4,052.00	5,912.00	13,312.00
—After Dep. Equip.....	1,076.14	2,383.80	3,972.04	5,822.62	13,180.28
One Year.....	57.86	68.20	79.96	89.38	131.72
Ten Years.....	578.60	682.00	799.60	893.80	1,317.20
—No Equipment.....	1,226.00	2,956.00	5,286.00	8,116.00	18,056.00
—After Dep. Equip.....	1,157.79	2,866.62	5,161.34	7,977.23	17,896.06
One Year.....	68.21	89.38	124.66	138.77	159.94
Ten Years.....	682.10	893.80	1,246.60	1,387.70	1,599.40
Lead of Family—					
—No Equipment.....	1,182.00	2,712.00	4,672.00	7,012.00	15,702.00
—After Dep. Equip.....	1,118.50	2,632.03	4,568.51	6,899.10	15,553.82
One Year.....	63.50	79.97	103.49	112.90	148.18
Ten Years.....	635.00	799.70	1,034.90	1,129.00	1,481.80
Equipment.....	\$2,352.00				
Depreciation in Ten Years.....	940.00				
	\$1,412.00	1,412.00	1,412.00	1,412.00	1,412.00
Depreciation in 10 Years (Married Man).....	578.60	682.00	799.60	893.80	1,317.20
NET OF INVESTMENT	\$ 833.40	\$ 730.00	\$ 612.40	\$ 518.20	\$ 94.80



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PHYSICIANS & HOSPITALS EQUIPMENT & SUPPLIES
KELEKET X-RAY EQUIPMENT & SUPPLIES



duced very cheaply in practically any low intensity desired, and in any length of needle desired. These needles can be utilized in the same fashion as radium needles. We have constructed new tables so that all of the tables which have been made available in the past for radium can now find their counterpart for cobalt 60. We have utilized cobalt 60 in over 50 patients in the relatively recent past, and find that it can be utilized as a complete substitute for radium in this regard. It is recommended, however, that on the basis of biological experiments that we have performed in which we have attempted to compare the biological effects of cobalt 60 as against radium when utilized interstitially, that an additional correction of about 15 to 20 per cent in lieu of an apparently greater intensity of biological effects obtained from cobalt 60 than what might be anticipated by pure calculation from the above described tables. The exact significance of this difference is not clearly understood by us at the present time, and we are still in the process of investigating its explanation. Actually, it is probable that this difference would not be clinically significant, and it is only an additional safeguard in the utilization of cobalt 60 for which it is recommended.

Radioactive Gold Colloid in Therapy. Gold 198 in colloidal suspension has recently come to the fore as a means of direct injection of a radiating medium into tumor-bearing tissue. It has a short half-life of 2.7 days and does not diffuse very far from its original site of injection, since 97 per cent of the injected activity remains close to the injection site. Unfortunately, uniform distribution of the gold in the tissue is not achieved, but it rather tends to puddle. Nevertheless, as much as 20,000 roentgens per gram of tissue is tolerated without slough, so that such puddling is not particularly dangerous and a tumoricidal result can still be obtained.

Hahn has reported success with the use of radioactive gold in the following conditions:

- 1) By intravenous injection, in palliation of Hodgkin's disease, lymphosarcoma, and leukemia.
- 2) By direct infiltration of tumor masses with gold colloid.
- 3) By intraperitoneal and intra-pleural injection in the treatment of pleural and peritoneal metastases in a great variety of tumors.
- 4) By instillation in the urinary bladder where 30 per cent is absorbed in the mucosa and 15 per cent transmitted to regional lymph nodes in 15 hours.

The handling of radioactive gold does present a special protection problem since 10 per cent of its ionizing radiation is contributed by gamma emission, whereas the remaining 90 per cent are beta particles. The injection must therefore be carried out by special injection devices and methods which will afford protection against the penetrating gamma radiation. The patients tolerate this method of radiation quite well, and in the average patient little bone marrow depression is seen until 200 to 250 mc. of the gold 198 are administered intraperitoneally or intrapleurally.

Radioactive Iodine as an X-Ray Therapy Substitute. Iodine 131 is used therapeutically in the treatment of thyrotoxicosis and also thyroid cancer. Like gold 198, its radiation consists of a mixture of beta particles and gamma emissions. Extremely large doses are tolerated well, and anywhere from 10 to 170 times the usual maximal dose used in thyrotoxicosis, and 2.5 to 35 times the usual cancer dose would be necessary to produce total thyroid and parathyroid destruction in the average adult weighing 70 kilograms.

Good therapeutic response with iodine 131 in treatment of selected cases of thyrotoxicosis is obtained with as little as 2 to 12 mc.; 100 to 150 microcuries per gram of thyroid gland are adequate in 90 per cent of the patients.

The patients selected for treatment are as follows:

1) Patients with serious heart disease or other complications which add considerably to the surgical risk.

2) Patients who have recurrent exophthalmic goiter, especially if the latter had had multiple resections of the thyroid and unilateral paralysis of the vocal cords.

3) Patients who refuse surgery.

There are additional criteria which are utilized by some investigators, as follows:

1) The patients usually selected for such treatment are over 45 years of age, since the possibility of late neoplastic change becomes more important in young patients.

2) In general, the patients with nodular goiter require larger doses and are more difficult to control than those with a diffuse type of goiter enlargement.

3) Thyroid enlargement, when present, should not be greater than about 80 grams.

Contraindications to radioiodine therapy are as follows:

1) The presence of a nodular goiter.

2) Extremely large thyroids with or without pressure symptoms.

3) Severe thyrotoxicosis with complication, since anti-thyroid drugs and other measures in conjunction with radioiodine probably provide a safer approach than radioiodine alone.

4) Pregnancy.

5) Previous treatment with ordinary iodine unless there is evidence of adequate uptake of the radioiodine by the thyroid gland.

In general, a case success rate of around 85 per cent is reported. The average time required to reach normal metabolic levels following treatment is about three months. Roughly, about five to six per cent develop hypothyroidism, but no other complications. In general the results of treatment of toxic nodular goiter with radioiodine have been relatively disappointing, since only four out of 10 do well. Among 288 patients who were reported up to 1949, five deaths occurred within a period of days to several months following radioiodine treatment. Two of the five died of myocardial infarction; two of cerebro-vascular accidents; and one of cardiac failure. When one considers the severely ill cases that were treated in this series, it is quite remarkable and it is probable true that none of these deaths can be attributed to the iodine 131. It is true also that severe progression of exophthalmos has not been a troublesome feature. Thirty per cent showed a significant increase in the prominence of their eyes, which compares favorably with similar results obtained following either subtotal thyroidectomy by surgery or X-ray therapy. True recurrences are rare when adequate therapy is employed over a sufficient period of time.

With regard to the tumors of the thyroid gland, benign tumors have an avidity for radioiodine which can be correlated with the degree of histologic differentiation. There is practically no uptake by the solid cellular tumors, whereas those adenomas with follicles showing definite but incomplete differentiation have been observed to have an avidity for iodine approaching that of normal thyroid tissue. Various reports of the uptake of radioiodine by thyroid cancer have been made. Of 10 out of 19 selected tumors of the thyroid which were shown to accumulate radioactive iodine, five tumors were of the benign metastasizing struma variety, and the other five had the structure of follicular adenocarcinoma. No pure papillary adenocarcinomas nor less differentiated cancers of the thyroid take up iodine selectively.

Seidlin has reported that the destruction of normal thyroid tissue by radioactive iodine results in an increased avidity for radioiodine by the cancer tissue in two out of three patients. He also reported that one out of two cases treated with thyroid stimulating hormones showed an increased uptake of iodine. It has also been observed that prolonged treatment with thiouracil may be followed by considerable increase in the iodine accumulating capacity of certain functioning cancers of the thyroid. This is most likely due to the increased elaboration and augmentation in action of the patient's own thyroid stimulating hormones.

In general it may be stated that approximately 15% of the cancers of the thyroid gland have a natural avidity for radioactive iodine. This can be improved considerably by destruction or removal of the thyroid gland so that the number that have an avidity for the radioiodine can be increased as much as 2 or 3 times.

The Use of Radioactive Phosphorus as an X-Ray Substitute. Radioactive phosphorus (P^{32}) is a beta ray emitter which is retained in the various tissues of the body in the following order: bone, liver, intestine, heart, kidney, lung, muscle, skin, and brain. And thus the radiation is a very diffuse type with particular emphasis upon the reticulo-endothelial system.

It is now generally accepted that this form of radiation is the treatment of choice for treatment of polycythemia rubra vera. The response is reasonably prompt considering the life of the red cell, and there is definite improvement after one month. The response is maximum in a period of 3 to 4 months. Purpura, however, may occur as a result of platelet depression. Ordinarily, 100 to 150 microcuries per kilogram of body weight, administered over a period of 10 days to two weeks appear to produce a satisfactory remission in the majority of cases.

The treatment of myeloid leukemia solely by P^{32} is probably not advisable and direct treatment over the spleen by x-ray is frequently of advantage. Also, persistent use of P^{32} for every relapse will lead to a hypoplastic bone marrow. Actually, the bone marrow must show definite hyperplasia before treatment is given. The average duration of life in leukemic patients is about $3\frac{1}{2}$ years, and the average dose necessary to effect a remission is 10.7 mc. over a period of 34 days.

Phosphorus 32 may also be used (but to less advantage) in the treatment of lymphoid leukemia; and also in the treatment of metastases to bone

from carcinoma, particularly if other metastases are not known to be present.

The Use of Strontium 90 as a Beta Ray Applicator and as a Radon Bulb Substitute. Because of the fact that the lens of the eye is particularly susceptible to cataract formation, beta rays have a certain superiority over x-rays in the treatment of superficial lesions of the cornea or of the eye. Thus, for example, a low-voltage x-ray machine such as the Phillips x-ray machine produces at contact and without added filter, a 23% depth dose at 10 mm., whereas with the ordinary beta rays the dose at 10 mm. is less than 1%. It is therefore clear that radiation about the cornea can be achieved more safely with beta radiation than with ordinary low voltage x-rays. Beta rays are not monoenergetic, as are alpha particles, and usually have a peak energy which is generally 3 to 4 times the average energy. Beta rays are high-speed electrons. In tissue, a beta particle having an energy of 1 million volts will have a range of approximately 4 mm., which is much larger than that of the alpha particle of similar energy, and therefore can penetrate deeply enough to be biologically effective from an external source. Gamma rays, compared with the beta rays, are very poorly absorbed in tissue; and the gamma ray or photon having an energy, for example, of 1 million volts, will be 99% absorbed in tissue on the average only after traversing 70 cm.

Strontium 90 has a half-life of 25 years, thus decreasing only about 2.7% per year. Strontium 90 emits two beta particles before decaying to stable zirconium, one having an average energy of about 0.19 Mev. and the other having a very high peak energy of 2.16 Mev. The peak energy of the weaker beta ray is 0.65 Mev. The more energetic of these penetrates on the average about 3 mm. beneath the surface, producing most of the radiation effect of strontium 90. Usually this stronger beta ray does not actually come from the strontium proper, but comes from the yttrium 90 which is produced by the decay of the strontium.

When there are 100 millicuries of strontium 90 in an applicator there is a surface dose of approximately 5.4 equivalent roentgens per seconds. Presently available applicators may produce 50 roentgens per second or more. No demonstrable difference between the radon bulb applicator and the strontium 90 applicator has been demonstrated. In the case of the strontium 90 applicator treatment was applied in direct contact with the conjunctiva for doses approximating 300 to 350 roentgens.

The conditions which appear favorable for irradiation of this type are:

- 1) Superficial tumors of the eye.
- 2) Pterygia.
- 3) Anterior segment tuberculosis.
- 4) Vascularization of the cornea to obliterate the corneal blood vessels.

The usual course has been 300 roentgens weekly for a total of 1200 roentgens. In the case of vascularization of the cornea or anterior segment tuberculosis this course may be repeated at intervals of one or two months for two or three times. After superficial keratectomy, irradiation should be begun after the first 24 hours. It may be utilized only as a preliminary procedure to corneal transplantation when there are invading vessels in the cornea, and following corneal transplantation when there is a possibility of vessels re-infiltrating the graft from the surrounding cornea.

It has not been proved to be satisfactory in the treatment of corneal ulcers.

SUMMARY

No effort has been made to describe every isotope which has been utilized as an x-ray or radium substitute, but rather those radioisotopes have been described which have already achieved some measure of success as x-ray and radium substitutes. It is probable that all of the radioisotopes described herein have achieved a permanent place in our treatment armamentarium and I am happy to relate, are already available in our radioisotope clinic at the University of Arkansas School of Medicine.

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REPORT ON THE "PETIT JEAN WORKSHOP" (SCHOOL HEALTH CONFERENCE)

H. W. THOMAS, M.D.
Dermott

The State Health Department, working with the State Education Department, and in liaison with the American Medical Association, the Arkansas Medical Society and the Arkansas Dental Association, conducted the Annual School Health Conference at Mather Lodge on Mt. Petit Jean from June 15 through 28. The purpose of this "workshop" was to discuss the school health program now in progress in Arkansas, to evaluate progress made to date, and to plan the future of the School Health Program with all professions concerned participating in such planning. Over the weekend of June 21-22, between "classes" or groups, practicing physicians and dentists from over the state, with their wives as Auxiliary members met with the faculty as guests of the State Health Department for a "round-up" discussion of the program. The Arkansas Dental Association was well represented.

I had been selected by the Council to represent the Arkansas Medical Society. Inasmuch as few busy physicians are able to get away from their practice for more than a very brief period and since any school health program, to be effective, must have the intelligent and active participation of the Medical Profession, it was felt that more doctors—and their wives—could become acquainted with this program, if they could come to the "workshop" for a discussion such as this. An effort was made to bring in physicians from the various sections of the state in order to bring the program to the attention of as large a segment of the Medical Profession as possible.

Those attending were: Dr. and Mrs. Hugh Edwards, Searcy; Dr. and Mrs. William Cooper, Dr. and Mrs. J. A. Harrel, Dr. and Mrs. Eugene Crawley of Little Rock; Dr. and Mrs. Louis Hundley, Pine Bluff; Dr. and Mrs. C. A. Taylor, Batesville, and Dr. and Mrs. L. E. Drewery, Camden. Dr. J. J.

Monfort, Batesville, was attending another meeting nearby and did "register in".

There were many school superintendents, principals, and other representatives of the Department of Education along with the doctors from the State Health Department, including Dr. J. T. Heron, Dr. Francis Rothert, Dr. Edgar Easley and Dr. Clayton Curtis. Dr. Fred Hein was on "loan" as a faculty member from the American Medical Association.

The scope of the discussions, recommendations formulated, and conclusions reached are all too voluminous for a report of this nature. In brief summary, it may be said that Arkansas does have an active School Health Program. It is as yet inadequate, but each year sees improvement. Some phases of the program surpass the average program of other states—i. e., hearing tests (with Audiometric charts) and the Massachusetts Vision testing program. The development of the program has been rather "spotty" in distribution, but more areas are being included each year. The State Health Department and the Department of Education both earnestly seek the help and guidance of the Dental and Medical Professions in this endeavor. This is not another "foot-in-the-door" effort to extend the great Mantle of Socialism—it is rather a conscientious effort on the part of all concerned to focus attention on a vital subject and the educators particularly, can do and are doing much in this field to encourage proper medical care by the private practitioner. They ask our help. Can we afford to offer less?

RANDOM THOUGHTS OF THE SECRETARY

July 23. To our Fayetteville colleagues: official temperatures, this noon: Fort Smith 100; Fayetteville 99! It's always cooler in the Ozarks!

July 26th. Visiting the Hundleys tonight, ever a pleasant and exciting occasion, winding up the festivities tonight with ham and scrambles on Pine Bluff's East Side.

July 27th. The radiologists are once again the guests of the Fred Hames at their country home and a leisurely afternoon is enjoyed by the group. Returning by Hot Springs with steaks at Coy's and long-distance "Jibbing" with the youngster who is tonight in Tucson en route to California.

July 29th. On this election day we are reminded that letters from physician colleagues are infrequent in this campaign.

August 7th. Today with the enthusiastic Rural Health Conference, an event which reflects much credit upon the two Henrys and the many others who have worked diligently to provide a worthwhile public relations project * * * taking time out to query a gubernatorial candidate on specific views and talking late in a group with our own "Bing" Blasingame who unstintingly gives of his time to the affairs of the medical profession.

President's Page

S. A. DRENNEN, M.D.
Stuttgart

August, 1952

MEMBERS:

A word about our recent Rural Health Conference. To those of you who missed this meeting missed something worth while. There were 600 registrations. Now mind you these 600 people were not medical people. They were lay people from the four corners of Arkansas come together for one common purpose—that of improving the health conditions of their respective communities in this state. There was no showmanship at this meeting. These people came to learn. It made me feel good to listen to those sincere and earnest discussions of their many problems and to know that I had a very small part in something that is so vital to our state in its march of progress.

The thing that marred my enthusiastic interest was the pitiful attendance of our own organization. There were only 65 registrations of our doctors. We are the ones who should be at the forefront of this great program. From my observation it is my opinion the doctors of Arkansas had better begin to awaken to what is taking place on every side of them. I mentioned to those people in my few remarks of welcome address that we are all stockholders in the great corporation called health and the dividends we receive will depend entirely upon our wisdom of management and may I say to you members our dividends will depend upon our cooperation in all worthwhile programs of our state. This Rural Health program was a fitting example of public relations and in my way of thinking we doctors muffed the ball.

Now, a word about our American Medical Education Fund program. The campaign is getting under way. The doctors are responding nicely. You have been apprised of the amount our school received last year and we have recently been told by the Foundation that we will receive about the same amount for this year. Now remember these dollars are dollars contributed by some doctor of our profession, whether he be an Arkansas doctor or not. Let us keep up the good work of contribution and show to the other states that we are not objects of charity.

YOUR PRESIDENT.

EDITORIAL

MITRAL STENOSIS AS VIEWED BY THE SURGEON

FRANK G. KUMPURIS, M. D.

The physicians over the country are saying that surgeons are devising methods of curing or treating chronic ills which has been the bread and butter of the medical man. As far as mitral stenosis is concerned, certainly one must regard this as true. For many years, the heart has been an organ which doctors have regarded as a challenge for surgery, and as many as fifty years ago, Samways, predicted that surgery of the mitral valve would someday become a reality. Twenty-five years ago, a British surgeon, Souttar, performed the first successful operation on a patient with mitral stenosis, using an original technic which he described in the British literature. Bailey, Glover, and O'Neil, following almost identically this same technic, started their successful approach to this problem in 1947. Today, surgery of the mitral valve, is a procedure which is being done in all medical centers in the country with gratifying results.

All of us have seen patients who have mitral stenosis who are enjoying apparently good health in the fifth and sixth decades of life. Again, we have seen others who are greatly incapacitated in the third, fourth and fifth decades of life. It is for this later group of patients that surgery is recommended. That patient who is relatively symptom free and is able to carry out the normal functions of life is to be considered well compensated. It is that patient with dyspnea, chronic cough, hemoptysis, chest pain, cardiac decompensation, who is unable to carry on normal activity that is considered a candidate for an operation on the mitral valve.

Mitral stenosis is the result of chronic disease of the mitral valve following rheumatic fever. At first, the two valve cups may only be thickened and no murmur is heard. The valvular process may continue very quietly until one is suddenly able to hear a presystolic mitral murmur, and yet the patient is suffering no symptoms from the distortion of the valve. Lucky is the patient who remains at this stage of the disease throughout life. Those whose disease of the mitral valves progress, may then get an increase in the adhesion of the two mitral valves, starting from the junction of the angles of the valves, until eventually the two valves become adherent leaving a small 5-10 millimeter opening in the center. At this point, the valves

have become distorted, so that the mitral valve resembles a fish mouth type of opening which is funnelled towards the left ventriculae. During the time that the valves becomes diseased, there are gradual changes which are occurring in the lungs which serve to change the vascular bed of the pulmonary system and which are responsible for the symptoms which these patients with severe mitral stenosis have. As the opening in the mitral valve becomes smaller, there is an increase in pressure in the left auricle, which by necessity results in a dilatation of the left auricle. This increase in pressure is transmitted into the pulmonary system, and as the pulmonary pressure becomes increased there is seen microscopically a perivascular reaction which eventually is supplanted by fibrous tissue, with the end result in severe cases, of pulmonary fibrosis. It is due in large part to this pulmonary fibrosis, that these patients have hypsnea, hemoptysis, chest pain, and are unable to carry on normal activity. Therefore, one should look at mitral stenosis as a "dam disease," as suggested by Alfred Kahn, because the diseased mitral valves act as a "dam" to the blood flow which must go someplace, therefore backs up into the pulmonary system resulting in pulmonary hypertension and fibrosis.

The surgical approach to mitral stenosis is directed towards releasing this obstruction or "dam". Technically, the operation is done through the auricular appendage of the left auricle, and is carried out in one of two ways. The adhesion of the mitral valves is referred to as a commissure, as suggested by Durant of Philadelphia. The separation of these valves is referred to as a commissurotomy. Either by the use of the right forefinger or with a commissurotomy knife on the right finger, the commissure is separated, so that the 5-10 millimeter opening in the mitral valves becomes large enough to admit two and a half to three fingers. When successfully done, the mitral stenosis is relieved, and only a very small amount of mitral insufficiency is produced, which is well tolerated by the patient. When improperly done, i.e., instead of separation of the mitral valves one actually tears into the cusps of the valve itself, then one has relieved the mitral stenosis, but given the patient a severe mitral insufficiency which is not tolerated and usually proves fatal.

Surgery of the mitral valve for stenosis is directed towards relieving the patient of the obstruction caused by the stenosis. Its proper execution produces very gratifying results. However, it is unfortunate that all patients with mitral sten-

osis cannot be operated and given an opportunity for a dramatic improvement of their condition.

NEXT MONTH'S EDITORIAL:

"Mitral Stenosis as Viewed by the Internist"

**SECOND ANNUAL RURAL HEALTH
CONFERENCE**

Continuing the splendid attendance record and with even more enthusiasm by the participants, the Second Annual Rural Health Conference of the Society and its co-sponsoring organizations was held in Little Rock, August 7-8th, 1952. Nearly 600 registered by mid-afternoon of the first day's session and the meeting room was on a "standing room only" basis throughout the full program.

Justified by interest of those in attendance and by favorable comment of the public and the press, this program promises to become outstanding in Arkansas, if not in the country. Speakers from outside the state speak in most complimentary terms in comparing the Arkansas meeting with those held in other states.

Members would do well to take a more active part in the deliberations of the conference. The opportunity is hereby afforded the medical profession to discover the thinking of our citizenry on our health needs and, in great measure, to permit us to advise the people of Arkansas the steps the medical profession is taking to meet these needs.

PROCEEDINGS OF SOCIETIES

The Arkansas State Radiological Society met at Pine Bluff July 27th as the guests of Dr. and Mrs. Fred Hames.

Members of the Drew County Medical Society and their families were guests of the nurses and office personnel of the physicians at a watermelon feast given at the Monticello City Park July 19.

AUXILIARY NEWS

The Auxiliary of the Southern Medical Association has on its Executive Board this year the following members from Arkansas: Mrs. C. W. Garrison, Little Rock; Mrs. Louis K. Hundley, Pine Bluff; State Councilor, Mrs. Gordon Oates, Little Rock; Vice Councilor, Mrs. J. G. Martindale, Hope.

OBITUARY

PAUL H. MUSE, age 52, died July 23rd of a heart attack at his home in Junction City. He graduated from Vanderbilt University School of Medicine in 1924 and had practiced at Junction City for 27 years. He was a member of the Union County Medical Society, the Arkansas Medical Society, the American Medical Association, the Scottish Rite Masons and the Shrine. Surviving him are his wife and one son.

AUGUSTUS M. TULLOS, age 73, died July 23 following a heart attack. Born April 7, 1879, at Raleigh, Mississippi, he graduated from the University of the South, Medical Department, Seawanee, in 1900 and first practiced at Jackson, Tennessee, before he located at Trumann in 1920. He was married to Miss Thelma Malloy, who, with two sons and two daughters, survive him. He was a member of the Methodist church, the Woodmen of the World, the Odd Fellows and of the Craighead-Poinsett County Medical Society and the Arkansas Medical Society.

HENRY LEE MONTGOMERY, age 86 years, died at his home in Gravelly May 17, 1952. Born in Mississippi, he graduated from the University of Arkansas School of Medicine in 1894, having previously practiced in Yell county. He located at Gravelly in 1900 and was the oldest physician in Yell county. He was a past-president of the Pope-Yelly County Medical Society, an honorary member of the Arkansas Medical Society and a member of the Fifty-Year Club, a Methodist and a Scottish Rite Mason. Surviving relatives are his wife and two daughters.

G. W. L. HARROD, age 83, died July 26. A graduate of University of Tennessee College of Medicine in 1906, he had practiced at Vilonia for his full professional life other than for a short period spent at Coal Hill. He was a life member of the Faulkner County Medical Society and of the Arkansas Medical Society. Survivors are two daughters and two sisters.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

LYMPH NODE TUBERCULOSIS AND ITS TREATMENT IN ACCESSIBLE NODES

CHARLES W. LESTER, M. D.
The American Review of Tuberculosis
December, 1951

Lymph node tuberculosis appeared in the literature in the fifth century when Clovis, King of the Franks, applied the "king's touch" for the treatment of scrofula (tuberculous cervical lymphadenitis). This form of therapy continued in vogue for more than 1,200 years until it was abandoned early in the eighteenth century after Queen Anne had used it unsuccessfully on Samuel Johnson. Thereafter, various forms of medical and surgical treatment proved equally ineffective until early in the present century, when the surgical technique was revised to produce excellent results from the cosmetic as well as the clinical aspects. In the early nineteen twenties the incidence of tuberculous infection of accessible lymph nodes (neck, axilla, and groin) declined markedly. Now, it seems to have been forgotten that lymph node tuberculosis presents its own special problems.

Lymph nodes are involved early in the course of tuberculosis, as in the primary complex of the pulmonary disease of childhood; and it is logical to assume that the origin of infection in the peripheral nodes also lies in the area drained by them. The focus cannot always be found and may have healed. All cases cannot be explained on this basis, however, and undoubtedly hematogenous infection plays an important role. The predilection for the neck in hematogenous infection is probably due to lowered tissue resistance due to previous infections of a different nature.

The human type of tubercle bacillus, rather than the bovine, is responsible for most cases of lymph node disease in spite of a widespread impression to the contrary. In 1908 more than 70 per cent of a considerable number of tuberculous nodes removed from the necks of children in New York City showed the human type of tubercle bacillus. Since that time the bovine infection in humans has practically disappeared.

Tuberculosis usually commences as a generalized infection with a systemic reaction. The local manifestations are characterized by an acute inflammatory process, the exudative phase and, when lymph nodes are involved, this is followed

by tubercle formation, caseation necrosis, and cold abscess. The process may be halted by fibrosis or calcification but there is always a perilymphadenitis present which binds the involved nodes and the surrounding tissue together. Liquefaction starting within the node usually perforates slowly into the surrounding tissue, and the resulting cold abscess has a wall of fibrous and tuberculous granulation tissue. When the pathologic process is halted by fibrosis, the encapsulated caseous material and tuberculous pus harbor organisms capable of reactivating the infection for an indefinite time. Tuberculous lymphadenitis may be only the local manifestation of a general infection with active foci elsewhere, which must always be sought.

The ideal treatment for tuberculosis, regardless of its site, is surgical eradication if possible, although this course, when applied to tuberculous cervical lymph nodes, seems to be the subject of controversy. This is hard to understand. Excisional therapy for pulmonary tuberculosis is a widely accepted and efficacious form of treatment and the same principle applied to lymph node tuberculosis should be even more effective and certainly less hazardous.

The same principles apply to the selection of all cases of tuberculosis for surgery. The patient should be a "good chronic." Operation should not be undertaken during an acute exudative infection nor attempted with active foci elsewhere in most cases. The condition of the patient should be good enough to permit a long operation.

Incisions are made in, or parallel to, natural creases for cosmetic reasons. All the diseased nodes should be removed and, as the process is always more extensive than it appears to be, this requires careful, sharp dissection. Cold abscesses with the underlying nodes are dissected out, not simply curetted and drained. Contamination of the wound with tuberculous pus will not make drainage necessary. All of the important structures are preserved except, rarely, the mandibular branch of the facial nerve which may be damaged, although often only temporarily.

In this respect the operation differs materially from the radical neck dissection for malignancy

where important structures are sacrificed to ensure complete removal of malignant cells. With tuberculous nodes it is better to preserve the structures and perform another operation if necessary. In the end result the scar is inconspicuous, deformity is absent, and the disease is controlled.

In some cases surgery is inadvisable, in others it is unnecessary, in still others it requires the help of other forms of therapy. Rest, adequate diet, and hygienic surroundings should be used in the acute form of the disease, and in the mild forms no other treatment may be needed.

In treating tuberculous nodes roentgen irradiation produces fibrosis and helps to encapsulate the disease. It cannot destroy *Mycobacterium tuberculosis*; it cannot remove caseation; it cannot cause the absorption of tuberculous pus and may hasten its appearance. Furthermore, the incidence of activation of tuberculosis in other parts of the body after irradiation of lymph nodes has often been observed. It can be a valuable adjunct in the treatment of sinuses after the caseation has largely disappeared and in that stage of the infection between the exudative phase and the establishment of caseation.

Chemotherapy, notably with streptomycin and para-aminosalicylic acid (PAS) is a recent and valuable addition to the therapy of tuberculous lymphadenitis. Antimicrobial drugs are most effective on the early, exudative form of the disease and have little value in the treatment of caseous foci or cold abscesses. However, chronic tuberculous sinuses respond well if the microorganisms are sensitive to the drug. Prolonged use of the drug will result in drug-resistant microorganisms. The concomitant use of PAS will retard this resistance. Antimicrobial drugs should be employed with discrimination lest an occasion arise later when the drug is urgently needed to prove to be ineffectual. The most recent adjunct to therapy is the streptokinase-streptodornase combination of proteolytic enzymes. Peripheral lymph nodes may become involved in the course of pulmonary tuberculosis and they are prone to break down into cold abscesses. Because of the pulmonary focus, excision of the nodes is inadvisable and simple drainage results in chronic draining sinuses. However, the use of these enzymes in the cold abscess cavity after wide drainage has been established produces a biologic debridement of the caseous material, permitting the growth of healthy granulations and closure of the sinus.

Tuberculosis in peripheral lymph nodes, particularly the neck, is still frequently encountered by

the physician. These infected nodes lend themselves to surgical excision. When operation is inadvisable or unnecessary, other forms of treatment are available which can also be used as an adjunct to surgery. Good results can be expected if the limitations as well as the potentialities of the various forms of therapy are heeded.

PERSONALS AND NEWS ITEMS

The appointment of Dr. James E. Doherty as head of the newly formed division of cardiology and head of the heart clinic at the University of Arkansas Medical School has been announced by Dean Hayden C. Nicholson, and State Health Officer Herron.

An advisory committee for the new department has also been named. Members include Dr. R. E. McLochlin, Dr. Fred William Harris, Dr. O. C. Melson, Dr. Dan Autry and Dr. J. N. Compton, all of Little Rock.

Dean Nicholson said the school was expecting this new department to become one of the outstanding divisions of cardiology in the United States and revealed that immediate arrangements have been made to double the space that is now available for this division's work.

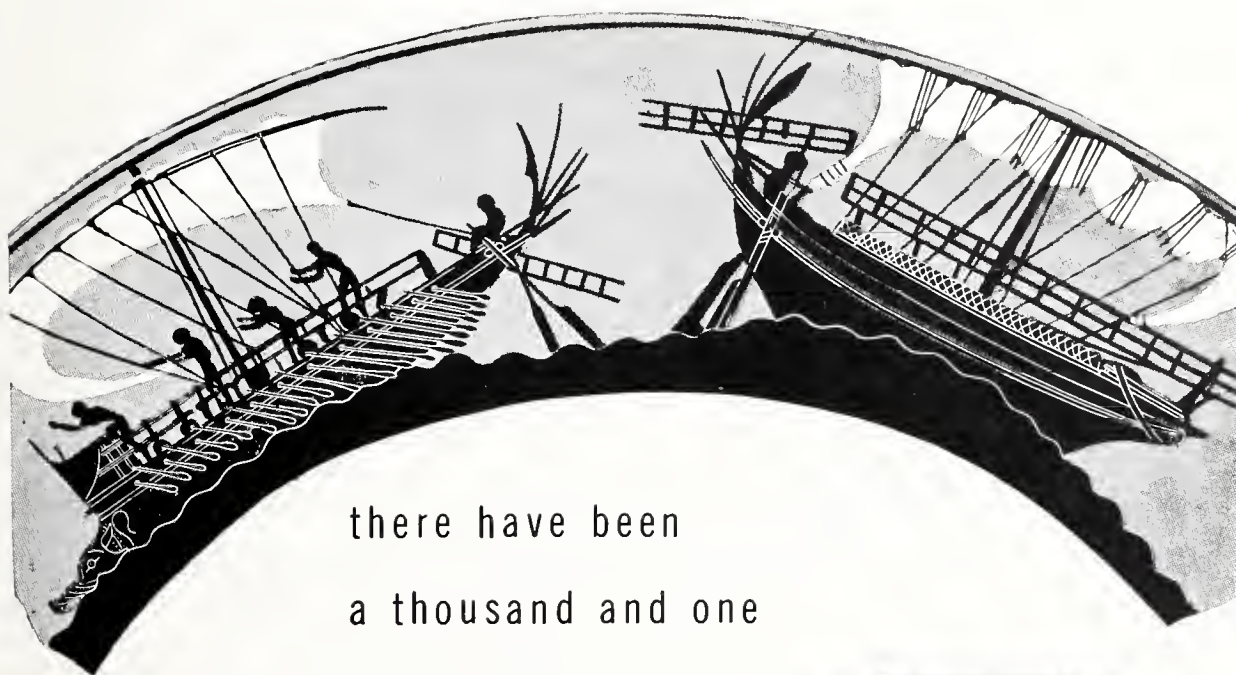
The clinic accepts only medically indigent patients during the clinic hours each Tuesday and Friday beginning at 8 a. m. Staff members who will be active in the operation of the clinic are Dr. Owen Beard, Dr. David Bauman, Dr. S. W. Abbott and Dr. J. S. Taylor.

"Radioactive Cobalt as a Radium Substitute and as a Gamma Source for Interstitial, Intracavitary, and Plaque Application," by I. Meschan, Little Rock, appeared in the July issue of *The Texas State Journal of Medicine*.

Emeritus Fellowship in the American Academy of Pediatrics has been awarded E. C. McMullen, Pine Bluff.

Newly-located in Arkansas for practice are the following: Robert Cook, Clarendon; Faber Carter, Sheridan, George F. Wynne, Warren; Albert R. Hammon, Harrison; Philip M. Young, Gillett; J. E. Coee, Joiner; Eli Gary, Arkadelphia; Hunter C. Sims, Jr., Blytheville; W. J. Wallingford, Newport; Thomas Hickey, Atkins, and W. E. Harville, Crossett.

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SEARLE RESEARCH IN THE SERVICE OF MEDICINE



R. B. Robins, Camden, recently addressed the Pine Bluff Rotary Club on "Medicine in This Changing World."

L. K. Williams has moved to new offices at Mena.

F. A. Corn has located at Lonoke for practice.

A. M. Bradley has joined Dr. Guy Hodges in practice at Rogers.

A. B. Dickey has been released from military service and has returned to his staff duties with the Arkansas Tuberculosis Sanatorium.

Chaney W. Taylor has joined the staff of the North Arkansas Clinic at Batesville.

Neil Compton has moved into new offices at Bentonville.

John M. Hundley has moved to new offices at 412 Cross Street in Little Rock.

J. B. Elders recently addressed the Methodist Youth Fellowship at Walnut Ridge on "The Profession of the Doctor."

BORN—To Dr. and Mrs. P. O. Thomas, Little Rock, a son, on August 4th.

William P. Kolb, Little Rock, has been certified as a diplomat of the American Board of Psychiatry.

The following have recently located for practice: Byron T. Johnson, Jr., Stamps; David Russell, Jasper; Ronald H. Selvester, DeQueen, and W. B. Center, Mountain Home.

MARRIED—On July 25th at Searcy, Julia Mary Caldwell and J. Arnold Henry, Russellville.

Jerry G. Robertson has located for practice at Dyess.

Fred B. Stone has joined Milton C. John in practice at Stuttgart.

BOOK REVIEW

A Textbook of Orthopedics with a Section on Neurology in Orthopedics: By M. Beckett Howorth, M. D., Clinical Professor of Orthopedic Surgery, New York University Post-Graduate Medical School. In association with: Fritz J. Cramer, M. D., Donovan J. McCune, M. D., A. Wilbur Duryee, M. D., J. William Littler, M. D., Walter A. Thompson, M. D. 1110 pages with 463 figures. Philadelphia and London: W. B. Saunders Company, 1952. Price \$16.00.

This new text is the result of the author's extensive experience stressing general principles of treatment without detailed techniques. Of especial interest is the section on abnormalities which is well illustrated. The importance of the relationship between orthopedics and neurology is a feature of the book.

Physical Medicine and Rehabilitation for the Clinician: Edited by Frank H. Krusen, M. D. 371 pages with 96 figures and 13 tables. Philadelphia and London: W. B. Saunders Company, 1951. Price \$6.50.

Based upon a series of lectures on physical medicine and rehabilitation originally prepared for the American College of Physicians and is planned to assist the physician with the usefulness of this specialty. This book will be of especial interest to the orthopedist and to the industrial physician.

Peptic Ulcer—Clinical Aspects—Diagnosis—Management: Editor, David J. Sandweiss, M. D., F. A. C. P., Associate Attending Physician, Division of Internal Medicine, Harper Hospital, Detroit, Michigan. Editorial Committee, A. H. Aaron, Henry L. Bockus, George E. Daniels, George B. Eusterman, L. Kraeer Ferguson, A. C. Ivy, Sara M. Jordan, Frank H. Lahey, Walter L. Palmer, Harry Shay, Albert M. Snell, Dwight L. Wilbur. 790 pages with 164 figures. Philadelphia and London: W. B. Saunders Company, 1951. Price \$15.00.

This book is the result of compilations of eighty-seven contributors and gives an authoritative discussion of the entire field of peptic ulcer. Therapy is fully covered.

Textbook of Refraction: By Edwin Forbes Tait, M. D., Ph. D., Associate Professor of Ophthalmology, Temple University School of Medicine; Attending Surgeon (Ophthalmology), Temple University and Montgomery Hospitals. 418 pages with 93 figures. Philadelphia and London: W. B. Saunders Company, 1951. Price \$8.00.

This is a practical textbook for the student and represents the notes and outlines used by the author in his classes.

Statistics for Medical Students and Investigators in the Clinical and Biological Sciences: By Frederick J. Moore, M. D., Associate Professor of Experimental Medicine, University of Southern California School of Medicine; Frank B. Cramer, B. A., Research Fellow, and Robert G. Knowles, M. S., Research Associate, Department of Experimental Medicine, University of Southern California School of Medicine. 113 pages, 11 figures, 16 tables. The Blakiston Company, Philadelphia, New York, Toronto, 1951. Price \$3.25.

This text will be useful to students but will serve more properly to those interested in investigation in medicine.

The Clinical Use of Fluid and Electrolyte: By John H. Bland, M. D., Assistant Professor of Medicine, University of Vermont College of Medicine. 259 pages with 75 figures. Philadelphia and London: W. B. Saunders Company, 1952. Price \$6.50.

This text endeavors to bring the physician a review and summary of present-day opinions as to fluid and electrolyte balance with special attention to the clinical application of these concepts.

One university has recently graduated sixteen epileptics from its regular courses.¹ Two have received their Doctor of Philosophy degrees, and three have received their Master of Arts degrees. One is now an assistant professor, another has his own business, and all are gainfully employed.

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2. Carter, S., in Conn, H. F.: Current Therapy 1952, Philadelphia, W. B. Saunders Company, p. 610.
3. Lennox, W. G., in Cecil, R. L., and Loeb, R. F.: A Textbook of Medicine, ed. 8, Philadelphia, W. B. Saunders Company, 1951, p. 1379.
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The JOURNAL

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Vol. XLIX

OCTOBER, 1952

No. 5

CARCINOMA OF THE LARYNX*

A. J. BRIZZOLARA, M.D.
Little Rock

Another paper about cancer may, I know, seem superfluous to the members of this society, for over the past few years you have been bombarded through the mediums of lectures and the literature with facts and figures concerning this pathology. Yet I feel that this particular entity, carcinoma of the larynx, is important enough to bear repeated repetition, so that you may constantly have it in mind.

My reasons for believing this are these: This disease entity comprises about two per cent of all carcinomas reported in this country. In Arkansas, however, from 1940 through 1950, there were only 42 carcinomas of the larynx reported to the central cancer registry. This is only about one per cent of all cancers reported to this organization as compared to two per cent for the nation.

There are two conclusions which we may draw from this; either the people from this state are less susceptible to this disease, which I firmly doubt, or we are failing to diagnose and report these cases.

My second reason for not apologizing for presenting another paper on cancer are several facts with which all of you may not be familiar. Many people, when the word cancer is mentioned, simply throw up their hands and assume an attitude of defeat, thinking that the prognosis for all cancers of the body, no matter where they be, is poor. This is far from the truth with cancers of the larynx. The facts I mentioned are these; although we know no more about the etiology of cancer here than for any other organ of the body, we do know the following; the vast majority are low grade, slow growing, squamous cell carcinomas with little tendency for early invasion. It is predominately a disease of males; about 97 per cent of carcinomas of the larynx occur in the male sex. Last and most important; in spite of being located in an organ in the interior of the body

which one might consider relatively inaccessible, this disease is second only to carcinoma of the skin in ease of diagnosis and amenability to cure.

To intelligently diagnose and treat any disease, some sort of classification is necessary. Consequently, over the years, the following classification has evolved. It is simply intrinsic and extrinsic carcinoma of the larynx.

The reasons for subdividing this disease into two groups is that although the vast majority of carcinomas in this organ arise from the true vocal cord, there is a smaller percentage which arise elsewhere and the diagnosis, treatment and the prognosis of the two groups is different. Those in the intrinsic group lend themselves better to early diagnosis, more conservative treatment, with a better prognosis than those in the extrinsic group.

The intrinsic carcinomas are classified as such because as stated above, most of these arise from the true vocal cord, are slow growing and are usually of low grade malignancy with little tendency toward early invasion. The lymphatics of the true vocal cord are few in number, actually consisting only of a potential space beneath the epithelium of the cord, the so-called space of Reinke. So rather than metastasizing by lymphatics, they grow by extension along the mucous membrane of the cord, actually growing for months or years along the surface of the cord, and in some instances even crossing the anterior commissure to involve the opposite vocal cord before ever growing outside the larynx. Probably the most important fact in classifying these as intrinsic carcinomas is that hoarseness, the prime symptom of this disease, appears early and thus brings the patient to his physician for early diagnosis. In contrast to the above, the extrinsic carcinomas of the larynx are classified as such because usually the histopathology is of a more anaplastic nature. That is, a more malignant cell type which grows much faster than the intrinsic ones. Then, too, the lymphatic drainage of the areas from which extrinsic carcinomas arise is very abundant so that these tumors are picked up early by the lymphatics and so metastasize much more rapidly than the intrinsic group. Last, and prob-

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ably most important, is that these carcinomas arising away from the true vocal cord produce hoarseness late so that many of these patients will not appear for diagnosis until the disease has been present for some time. Anatomically, intrinsic carcinomas are those arising from the true vocal cords, the ventricles of the larynx and the under surface of the false cords. Extrinsic carcinomas are those arising from the upper surface of the false vocal cords, from the aryepiglottic folds, from the arytenoids, from the epiglottis and from the upper anterior part of the esophageal wall, the so-called post-cricoid carcinomas.

The diagnosis of this disease hinges on one word; hoarseness. If you remember no more of this paper than the following, you will save lives. Any hoarseness persisting for over two weeks, particularly in people past 35 to 40 years of age, is cancer until proven otherwise. The reason this symptom is so important is that anything interfering with a person's voice brings him to his doctor early, for the voice is the prime means of communication with his fellow man and any abnormality in it demands immediate attention.

In this disease we have the opportunity to overcome the one factor that usually defeats us in malignancies elsewhere in the body. That is the time interval between the beginning of the growth and the appearance of symptoms, for in this particular organ they are almost simultaneous in the vast majority of cases. Presented with a patient with hoarseness in whom you suspect malignancy, the following things should be done. First, an indirect or mirror examination of the larynx should be performed. This is a relatively simple procedure and can be carried out with a minimum amount of equipment. All one needs is a light source, either a head light or a head mirror, a warmed laryngeal mirror and a patient. The following is the best method of carrying out this examination. The doctor and patient are seated facing one another. The patient's tongue, which you have asked him to extend, rather than pulling it out of his mouth, thus avoiding frightening him, is grasped with a sponge or towel between the thumb and second finger of the left hand, being careful not to exert too much traction on the frenulum of the tongue. The warmed laryngeal mirror in the examiner's right hand is inserted into the pharynx from the left side of the patient's mouth and advanced. The mirror is then gently laid against the raised and retracted palate and the light source brought to bear on the mirror. This will usually bring into view the vallecula, the epiglottis, the arytenoids and the hypopharynx. If you will then ask the patient to say "A" or "E",

you will note that the epiglottis is carried forward, exposing the interior of the larynx and bringing into view the aryepiglottic folds, the false vocal cords, the true vocal cords and when the patient is asked to inspire, the subglottic region. The laryngeas of 90 per cent of patients presenting themselves to you may be examined in this manner. A few will have hypersensitive gag reflexes but even they may be adequately examined if one will take the time to spray or swab a little 10 per cent solution of cocaine on to the soft palate and posterior pharyngeal wall about five minutes before completing examination. Occasionally one encounters a patient who has such a hypersensitive gag reflex that this method fails and it is necessary to resort to direct laryngoscopy.

There is one other point in this part of the examination which it is important to remember. In some patients, no matter how cooperative, one will not be able to visualize the anterior commissure of the larynx. That is the point where two vocal cords meet anteriorly. It is very important to visualize this area for, until the junction of the two vocal cords anteriorly has been seen, the larynx has not been completely visualized. It has been said that death lurks under an overhanging epiglottis, meaning, of course, that a very small carcinoma of the vocal cord, or at the base of the epiglottis, may be hidden from view, by the slight overhang which some laryngeas present even during phonation. It is of course important that these patients have a direct laryngoscopic examination.

Following visualization of the lesion, a direct laryngoscopy and biopsy of the lesion is done. Very occasionally one will encounter a patient in whom it is impossible to visualize the larynx, either with a mirror or by direct tubular vision. In these cases it is necessary to resort to general anesthesia and suspension laryngoscopy. So, you see, we are not limited by available means of examining patients who present themselves with the symptoms of hoarseness.

The treatment of this disease is carried out either with surgery or X-ray irradiation. There is not space here to discuss the relative merits of each method—suffice it to say that over the years outstanding laryngologists have come to accept surgery as the best means of treatment in the majority of cases.

There are two surgical procedures utilized. The first is laryngofissure or thyrotomy, an operation which consists simply of splitting the larynx in the midline anteriorly, opening it and removing the involved area with a wide margin of normal tissue following which the larynx is closed, thus leaving

the patient with a more or less normal voice depending upon the extent of tissue removed but in any event leaving him with a communicable voice. This procedure is used in patients with intrinsic carcinomas of the larynx in which there is no vocal cord fixation, no extension of the growth on to the arytenoid and no subglottic, or supraglottic, extension. It is also employed, in selected cases, even though the carcinoma has crossed the midline anteriorly to involve the anterior tip of the opposite cord. Employing this operation in cases which are suited for it, five year cure rates of from 75 to 95 per cent are reported by laryngologists.

There is another procedure which one may utilize in very early carcinomas of the larynx. That is those limited to the middle third of the true vocal cord with no extension. It is suspension laryngoscopy and endolaryngeal removal of the growth. It is reported that from four to 11 per cent of early intrinsic carcinoma of the larynx may be treated by this method. This operation, of course, offers the patient the best postoperative voice with the same chance of cure as obtained with laryngofissure. Let me say, however, that cases selected for this type treatment must be carefully screened and if there is any doubt as to the advisability of utilizing this method, one should do a thyrotomy or laryngofissure instead.

Laryngectomy is the other operative procedure used and is performed in cases of extrinsic carcinoma of the larynx or in cases of intrinsic carcinoma of the larynx which had extended to the point where there is vocal cord fixation or extension of the growth onto the arytenoid, or extension of the growth below the vocal cord. Laryngectomy, of course, deprives the patient of his normal voice, necessitating that he either learn buccal speech or utilize an artificial larynx. This procedure in cases in which it is indicated, offers from 50 to 75 per cent five year cure rates as computed by various clinics.

As I said in the beginning, I offer no apologies for another paper on cancer, for as you see, carcinoma in this organ lends itself to treatment better than most and as we become more cognizant of the importance of the simple symptoms of hoarseness and better equipped with facts about this disease so that our patients are intelligently advised as to what should be done, the cure rate for carcinoma of the larynx will exceed the current figures.

SURGERY OF THE HAND*

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Surgery of the hand is primarily a matter of surgery of tendons. Permanent disability of this organ as a sequella to trauma, infection, poliomyelitis, or other disease may, and too frequently does, constitute an insurmountable economic handicap for the patient. Kanaval has aptly stated that "The hand of the working man is his most valuable asset. Without it, life becomes a burden." Loss of function of this important structure is a tragedy of such magnitude that its restoration deserves the special consideration it has received during the past few years. The hand is so exact in its construction that only the most diligent application of sound surgical principles will prove efficacious in its management. Moreover, a thorough knowledge of its intricate anatomy is mandatory for the surgeon who treats the injured hand. Without this knowledge, he may be certain only of uncertain results.

Lange and Lexter's early discussions of tendon surgery were followed in this country by John B. Murphy's contributions. In 1933, Alan Kanaval published his monograph, "Infections of the Hand"; a medical classic that, more than any other work, has served as a stimulant for better care of this important structure. Recently, Koch and Mason of Chicago, Bunnell and Graham on the west coast, Flynn in Philadelphia, and many others have made outstanding contributions to the art of tendon repair and transplantation. Slocum and Pratt have stressed the fundamental functions of the hand which are hook, pinch, and grasp. This triple concept provides the surgeon with a basis for evaluation and treatment of the injured upper extremity.

Like other structures of the body, the hand may be disabled from diseases as diverse as tuberculosis, neoplasms, arthritis, poliomyelitis, and other systemic processes, but these are surgical problems that are singular unto the orthopedic surgeon and will not be given consideration in this discussion; while the injured hand is common to all physicians and must be treated by each of us either to the limited extent of rendering first aid or to giving definitive care. Not infrequently, it is the care that the wounded extremity receives initially which determines the extent of residual disability that may follow. Unquestionably, the first few hours post-injury, from the standpoint

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of functional recovery, are the most important. It is the management of the wounded hand during this period that will be given consideration with emphasis upon the care of the tendons. As stated earlier, surgery of the hand is primarily surgery of tendons. (Slide I-A).

Analysis of a large number of cases of tendon injuries discloses that volar lacerations occur more frequently than similar injuries on the dorsal aspect of the hand in a ratio of 2:1. Further breakdown, as shown in Slide I-B, reveals that 48 per cent of all volar injuries occur to the digits with the flexor tendons opposite the proximal phalanges sustaining three-fourths of the volar digital injuries, or one-quarter of all tendon injuries sustained by the hand. This preponderance in one small area is especially significant in view of the fact that the poorest results, even in those patients treated by the most skillful surgeons, occur consistently in this area. Bunnell has described the volar surface of the digits and distal palm as the "no man's land of the hand." Poor results in this area are assured if every precaution is not taken by the surgeon. This inherent danger is due to the anatomical crowding within the flexor tunnels opposite the proximal phalanges; two large tendons in intimate contact with one another are compressed into a fibrous tunnel which is lined with a synovial sheath whose function it is, to assure gliding of the tendons. Moreover, the blood supply of tendons surrounded by tendon sheaths is poor while scar tissue proliferates rapidly.

The remaining 52 per cent of the injuries occurring over the volar surface of the hand are sustained by the palm and wrist. Fortunately, in this region, except for the distal portion of the former, the prognosis is less grave. The blood supply is better, there is more room for proliferation of scar tissue and the adherence of one tendon to another is less disabling. In addition, post-operative mobilization of the repaired structures is accomplished more easily. (Slide I-C).

Injuries to the extensor tendons of the hand—one-third of all tendon injuries occurring in the upper extremity—consistently result in less disability than those sustained by the volar tendons. Primarily this is because their blood supply is better and the loose areolar tissue in which they lie is more adaptable. Also, their tendon sheaths are restricted to the region of the dorsal carpal ligament. In many instances, due to the communications between the common extensor tendons, their suture is unnecessary. Healing will often be found to have occurred within four weeks

with no other treatment than simple immobilization in a hyperextension splint.

In regards to causative agents, they are too numerous to mention. It is not so much a matter of the agent that produced the hurt as it is what type of injury resulted from it. A cleanly incised wound, as a rule, offers the most favorable prognosis, for both primary healing and recovery of function. On the other hand, crushing and avulsion injuries as well as deep burns are infinitely more perplexing problems. Even though the prognosis is less good and treatment more difficult, the aim of treatment must remain unchanged.

It behooves the hand surgeon to be ever constantly aware that the object of treatment, beginning at the time of the first examination, is four-fold (Slide II). Initial planning should give consideration to each of these goals. It is right that the prevention of infection be considered foremost, since an uncontrolled infection resulting in an extensive destruction of tissue will preclude a satisfactory result. In most instances, the development of the four objectives can proceed concurrently or in sequence. Consideration will be given each in turn.

Altemeier has said, "It must be remembered at all times that it is not a wound that is being treated, but a patient with a wound." A careful history must be obtained (Slide III). Even though emphasis is placed upon the injury, one should interrogate the patient sufficiently regarding the general systemic and past history, to determine known abnormalities which might affect the prognosis or treatment. The surgeon should learn all possible regarding the type of accident, and the conditions under which it was sustained. An accident occurring in a clean factory or one which occurs on a dirty street may require radically different treatment. Initial treatment rendered elsewhere, both to the wound and to the patient as a whole, should be ascertained. Drugs administered earlier must be known to the definitive surgeon. Foreign bodies removed from or inserted into the wound including chemical agents, which are to be condemned, should be noted.

It is of extreme importance to ascertain the time lapse between the injury and the administration of definitive surgery. Hard and fast rules are, as elsewhere, unsatisfactory; but, in general, the primary suture of tendons is contraindicated if the wound is more than six hours old. But many factors affect this arbitrary period. Some wounds can be closed much later, while others should never be closed initially. The location of the wound is of extreme importance. As stated earlier,

tendons in sheaths have a poor blood supply and therefore are less capable of controlling contamination. This is especially true of the volar tendons of the digits. The causative agent and the environment at the time of injury are also given consideration. The nature of the wound is of extreme importance. Flynn has demonstrated that while most helpful in combatting infections of the hand, the antibiotics have not made it possible to extend the probable safe period of six hours between injury and definitive treatment.

The patient is examined (Slide IV). At least the basic elements of a general examination are indicated. Local examination of the wound except to control bleeding, or to determine in a general way the extent of the wound, should be deferred until definitive surgery can be undertaken in a modern operating room. Probing into the wound in the emergency room by unmasked interns and medical students is to be avoided. X-rays, if indicated, are obtained prior to surgery. Sensory impairment and loss of active motion of joints, must be sought for before the induction of anesthesia, which should be either general or regional. The status of the sensory distribution to the hand by the ulnar, median, and radial nerves must be accurately delineated. Active flexion and extension of the intrinsic and extrinsic muscles activating the hand are sought for. The thumb is examined for the integrity of its opponens mechanism.

The remainder of the examination is carried out under anesthesia with a blood pressure cuff applied about the upper arm for use as a tourniquet. The character as to rate, source, and color of the bleeding is observed. The extremity is then elevated for three minutes, or, if the wound is considered clean, a Martin bandage may be used, and the tourniquet inflated. Clots are wiped away and the nature and severity of the wound is observed. Foreign bodies are sought for. Exposed bones and joints are examined and the lacerated and crushed tendons noted. The degree of treatment to be administered is then determined by the surgeon.

Treatment (Slide V) of the patient is both general and local. Pain, shock, and loss of body fluids are treated as indicated. Tetanus antitoxin, or toxoid, and antibiotics are administered unless contraindicated because of sensitivity. Specific local treatment is dependent upon several factors that may be grouped under the following headings: one, whether or not the wound can be converted into a clean wound; two, facilities available; and three, the skill and experience of the surgeon. The surgeon may choose

to limit initial treatment to first aid, or, after having obtained a thorough knowledge of the wound and taking the above factors into consideration, he may effect a debridement, control of bleeding, and closure of the skin and subcutaneous tissue only, by approximation of the skin edges or by skin grafting if necessary. Only the dirtiest wounds that cannot be converted to clean wounds should be left open. Secondary repair of unsutured tendons may follow primary healing by three weeks to one year.

A third alternative for the hand surgeon is to suture the nerves leaving the tendons for a secondary operation. Fourthly, he may effect an initial repair of all structures including the tendons either by primary suture of the tendon or by tendon grafting. Bunnell has advocated removal of both the flexor profundus and flexor sublimus in the case of their laceration opposite the proximal phalanges and substitution with a tendon graft extending from the base of the hand to the base of the distal phalanx. However, Koch and Mason have demonstrated that resection of the flexor digitorum sublimus tendon and the removal of their common tendon sheath so that the suture line of the flexor digitorum profundus lies in the subcutaneous fat, will yield satisfactory functional results. Tendon grafts are most applicable when there is a loss of tendon substance or in the case of delayed tendon repairs where scarring of the local structures is excessive. Grafts may be obtained from either the flexor digitorum sublimus, palmaris longus, or the long extensor of the toes.

In no other branch of surgery is a satisfactory result so dependent upon the meticulous technique of the surgeon (Slide VI). A trained anesthetist, a well-equipped operating room, an adequate number of assistants, and the proper instruments must be available. Large abdominal clamps, thumb forceps, and retractors are a liability in tendon surgery. Eye instruments are infinitely more applicable. Small Halsted clamps and a very fine adson thumb forcep, along with the proper suture material, are extremely useful for the apposition of those sensitive structures. A bloodless field is assured by the application of an inflatable tourniquet to the upper arm. Roller gauze bandage is used for reinforcement of the cuff to insure an even pressure over the arm. Skin preparation is limited to a thorough 10-minute scrubbing with soap or one of the newer detergents; after which, the extremity is draped in such a manner that it can be freely positioned within the operative field as dictated by the changing need of the surgeon. When convenient, it is desirable to place the extremity

upon an arm board so that the surgeon and his assistants might be seated during the repair that is often lengthy.

After the wound has been inspected, it is thoroughly debrided with the removal of all devitalized skin, subcutaneous tissue, tendons, muscle, bone, and even nerve. The wound is thoroughly irrigated with as much as 10 to 20 liters of normal saline. This is best accomplished by having an open flask suspended from an intravenous stand with sterile tubing leading into the operative field. The flask can be refilled by the circulating nurse without interfering with the surgeon. A sterile pan with a drainage tube leading into a bucket is useful for removal of the washings. Adequate exposure is mandatory and is obtained by extending those incisions already present, in line with the skin folds or by creating new ones along proper lines. Slide VII taken from Bunnell's text, demonstrates safe skin incisions into the hand. Incisions transverse to flexor creases must not be used. Contracted scars result from such ill-advised incisions in the hand. (Slide VIII). The exposed tissues are handled as gently as possible and at all times all structures are kept moist with damp sponges soaked in warm normal saline. Damaged blood vessels are ligated. Sectioned nerves and tendons are located and positively identified so that proximal nerve stumps are not sutured to distal tendon stumps and vice versa, as has happened on the volar surface of the wrist. After the wound has been thoroughly debrided, explored, and every structure identified, the tourniquet is deflated and all bleeding points clamped and ligated with a very fine suture material; following which, the arm is elevated for three minutes—by the clock—and the tourniquet reapplied. Suture of the nerves and tendons is then effected. The sectioned nerve is approximated with special care so as not to rotate it about its longitudinal axis. It is sutured with 5 or even 6-0 arterial silk, several small sutures being placed around its periphery but only through the perineurium. Suture of tendons (Slide IX) is effected either by 3-0 or 4-0 untreated silk, in which event, the technique of Wagner, Bunnell, or of Koch and Mason may be used, or with stainless steel wire according to the pull out technique described by Bunnell. Bunnell's pull out wire technique is especially useful on the volar aspect of the fingers where minimal tissue reaction is essential to obtaining a functional result. Due to the fact that catgut causes considerably more local reaction than either silk or stainless steel wire, it is never indicated in tendon repairs except when suturing tendons directly into bone where

scarring may assist its anchorage. Moreover, O'Shay has demonstrated that the incidence of infection in those cases sutured by chromic catgut as compared to silk was approximately six to one.

(Slide X) Either the wound should be closed loosely without drains or left open. The incidence of infection occurring in hand injuries which are closed with a drain in the wound is consistently four times as great as those cases closed without a drain. It is recommended that the deep fascia and the subcutaneous tissues be approximated loosely with either an extremely fine catgut suture such as 4-0 plain or an equally small silk suture. The skin edges are closed without tension as swelling can be anticipated. Skin grafts and pedicle flaps should be used to obtain a primary closure in the case of destruction of soft tissues. If after debridement the wound is still considered to be contaminated, primary repair is not undertaken, but the wound is packed open with an ointment dressing and a secondary closure performed at a later date.

But even after the operative repair, the surgeon's responsibility is far from ended. The post-operative dressing is as important as the surgery itself. An even pressure of an adequate degree is absolutely essential. Homan has observed that this basic principle has been "perennially discovered, discredited, forgotten, re-discovered, and re-affirmed." Koch, Mason, Reid, Orr, and Truetta have also emphasized the need of preventing venous and lymphatic congestion in the extremity and the necessity for maintaining the circulation of the subcutaneous tissue. Uncontrolled swelling is extremely detrimental to the injured hand. Swelling due to any cause accentuates vascular and lymphatic congestion thereby producing tissue anoxia with further loss of fluids and additional swelling. Fibrin deposited in the soft tissues is organized into fibrous tissue resulting in permanent loss of function of the part. Sterile mechanics waste placed over the dressing and held securely by elastic bandages, or stockinette cut on the bias, if properly applied perform this function admirably.

It is well-established that immobilization of the hand tends to produce residual stiffness of its joint: nevertheless, nothing is gained by the constant irritation of damaged tissues which are undergoing the inflammatory process of repair. Hugh Owen Thomas, many years before the present generation of surgeons, asserted, "inflamed and injured tissues need rest". It is the surgeon's responsibility to see that the injured tissues obtain this needed rest. Still, immobilization must not be unnecessarily prolonged. It should be continued

as long as necessary, but must be discontinued at the earliest possible date.

Convalescence can be divided into three phases. The first is the immediate post-operative period that extends approximately one week during which fibrin and early fibrous tissue are laid down between the tendon ends. The second phase between the ends of the first and the fourth weeks is the period of organization and formation of the healing process. From the fourth week it is extended until the patient has obtained the maximum amount of recoverable function. Immediately following surgery, during the proliferative stage of repair, the patient should remain recumbent with the extremity elevated on a pillow to encourage drainage and prevent edema. During the formative stage of the healing process, he may be ambulatory and is encouraged to use that portion of the extremity which has not been immobilized.

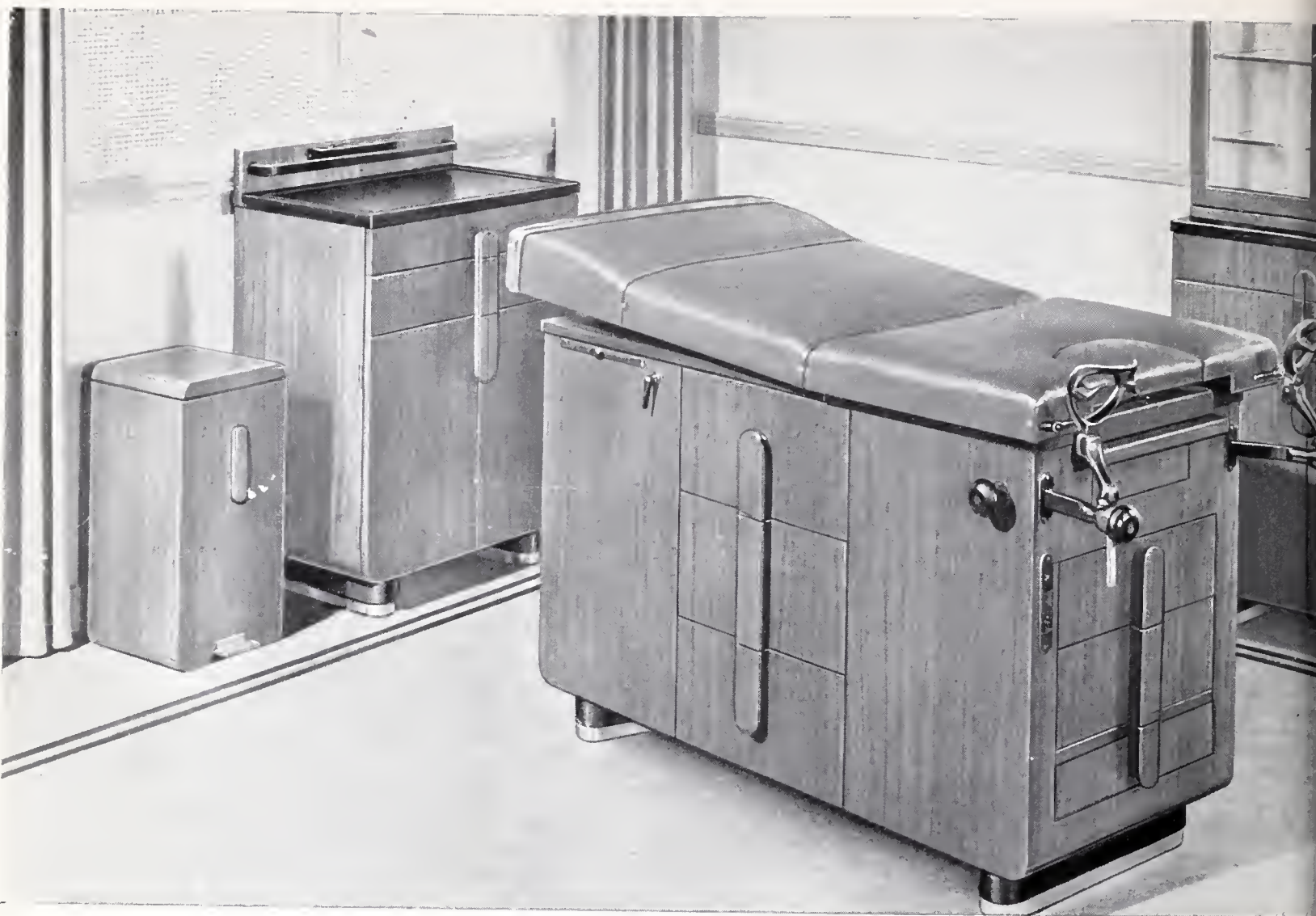
After removal of the cast and the skin sutures at the end of the fourth week, an intensive phase of physiotherapy is begun. It is extremely important during this period that the circulation of the extremity be protected as swelling of the hand can be anticipated after removal of the cast. The subcutaneous fibrosis that follows edema will inevitably further impair the functional result. Active and passive exercises are instituted. Hydrotherapy in the form of whirlpool and lanolin massages are often beneficial. Dynamic splinting and electrical stimulation are used in certain specific instances. Encouragement of the patient's efforts by his physician is essential as the result is, as much as anything else, dependent upon the patient's intelligence and his willingness to cooperate in the post-operative treatment. Active exercises must be performed at least five minutes out of every hour. The surgeon must seek the patient's cooperation.

As for results, (Slide XI) in those cases of primary suture of the tendons where the destruction of soft tissue has not been extensive and where proper surgical techniques have been used and where the patient has cooperated in the post-operative care, the surgeon can anticipate that approximately 65 per cent of all flexor tendon repairs will produce a satisfactory result; while 90 per cent of his repairs of the extensor tendons will prove to be satisfactory. In some instances, a poor initial result may be improved by secondary operative procedures.

In summary, it should be noted that injuries to the hand, severe and mild, often result in an economic disaster for the patient; and that this disaster may be diminished by adequate definitive

care following the accident and, in some instances, by secondary operative procedures at a later date. The injured hand demands the same care as any other major wound. Adequate facilities, consisting of an operating room, proper instruments, and an anesthetist should be available. The specific surgical techniques employed are necessarily dependent upon the skill and the experience of the surgeon, but the following procedures must not be performed: (Slide XII) (1) Both long flexor tendons should not be repaired in the distal palm or in the volar tunnels of the digits. Either the profundus alone is sutured or a primary tendon graft is performed. (2) The wound is not drained. It is closed primarily or packed open. (3) Catgut is never used for suture of tendon to tendon. Suture material should consist of either silk or stainless steel wire. (4) The skin edges are not approximated under tension. Skin grafting is used whenever necessary for primary closure of a clean wound. (5) Caustic antiseptics are not used to produce further destruction of tissues. Soap and water or detergents are used for skin preparation. (6) Post-operative bleeding or excessive swelling must not occur. Hemostasis should be complete and the extremity elevated post-operatively. (7) Immobilization is not continued indefinitely, but is sufficient to permit healing. Mobilization, once begun, is pursued by both the patient and the surgeon very assiduously until all function possible has been restored.





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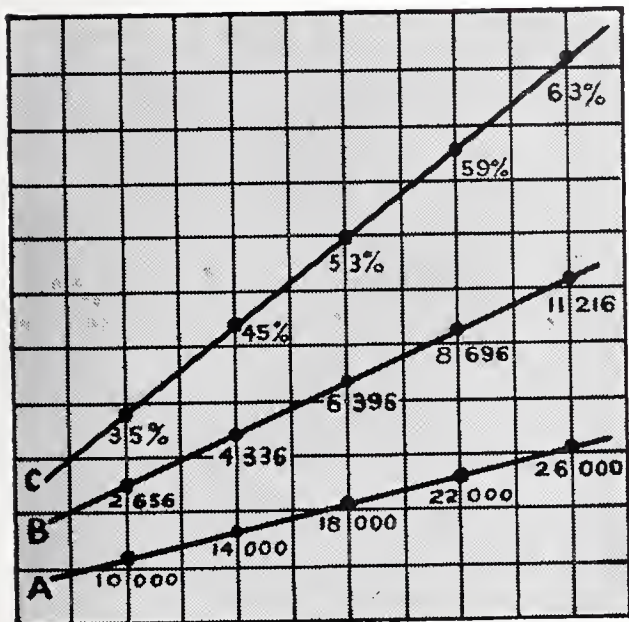
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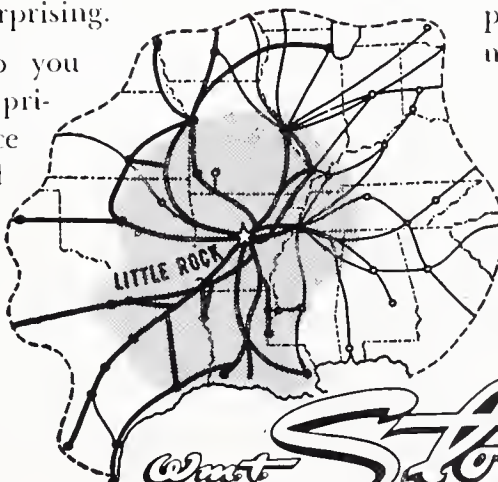
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SKIN CANCER *

LAWRENCE ZELL, M.D.

Little Rock

* Read before the Seventy-sixth Annual Session, Arkansas Medical Society, Little Rock, April 21, 1952.

As practicing physicians, the problem of skin cancer resolves itself into two phases, diagnosis and treatment. If we were to follow the usual text-book outline for this discussion we would spend considerable time in reviewing the gross appearance of the many cutaneous malignancies in minute detail. This would be a rather fruitless task. Every structure of the skin may give rise to benign or malignant growths; the epidermis, connective tissue, nerve, muscle blood vessels, sweat and sebaceous glands. In addition there are nevi, tumors of viral, bacterial or mycotic origin, lymphomas, metastatic lesions and unclassified granulomas which at times, must be considered in the differential diagnosis. Since the only accurate classification of cutaneous neoplasms is on the basis of the cell type, microscopic study of each tumor is indicated. To stress this point, one might say that the gross appearance should raise a suspicion of cancer but that the diagnosis and accurate determination of the type of cancer rests upon microscopic examination. Unless biopsy becomes a routine procedure in all lesions suspected of being cancerous very embarrassing errors will be made in diagnosis and treatment. The gross appearance of a lesion is not a reliable basis upon which to diagnose cancer, even of undetermined type.

It is fortunate that an accurate diagnosis of skin cancer is not dependent upon a burdensome mass of knowledge of the minute detailed appearance of the gross lesion but rather on the simple office biopsy. Biopsy is a simple office procedure and has many advantages. It will give you a definite diagnosis which may influence the plan of treatment, indicates the possibility of metastases and is of inestimable value should the lesion recur. The cancer conscious patient is more readily satisfied if the benign nature of a lesion is confirmed by microscopic study. Occasionally the medico-legal aspect may loom large in the absence of microscopic proof of the nature of the lesion destroyed. The wisest policy is to rely on biopsy for the diagnosis of all cutaneous growths. Often the objection is voiced that biopsy increases metastases. This has not been substantiated and the consensus of opinion is that biopsy of cutaneous neoplasms is without danger.

It might be well to mention some precautions that should be observed in obtaining a biopsy so as not to damage the specimen. Infiltrate with novocaine around the biopsy site but not into it. If the specimen is taken from the edge of the lesion so as to include a small portion of normal skin, apply pick-up forceps to the normal skin only. Do not crush the specimen with the forceps. Make the biopsy sufficiently deep so as to include a large portion if not a full thickness of the dermis. If the biopsy is too superficial, often the most informative portion of the lesion is missed. One suture will often produce better approximation if the biopsy extends to the subcutaneous tissue.

With the diagnosis established we may proceed to therapy. This discussion will not include melanoma or the less common skin tumors but will be limited to the common type of skin cancer, basal cell and squamous cell. In view of the accessibility of the primary lesion the frequency of recurrences is rather surprising. The basic cause of most recurrences is inadequate therapy. Any treatment method has as its goal the complete eradication of the growth. The controversy as to whether irradiation or surgery is superior is pointless. Judgment is required in selecting the method of treatment best suited for the individual lesion. Improper judgment is responsible for many failures. Again and again in the literature we find reports of hundreds of patients treated by someone's routine scheme of therapy. This is oversimplification for rarely are more than a few lesions similar. Many considerations enter into the selection of the proper treatment. The histologic type, location and size, fixation to underlying structures, previous treatment, metastases and the physical condition of the patient are all factors which influence the choice of treatment. Even expense can be considered if the lesion can be treated properly by one of several methods. The therapist should recognize and admit the limitations of his particular method rather than endeavor to perfect a routine made of therapy applicable to all lesions. The family physician can correct this therapeutic enthusiasm by carefully considering what method of treatment is indicated. Your referral usually determines the therapeutic approach which will be utilized.

There are some guides in choosing between radiation and surgery. These are not dicta for again the various factors mentioned earlier must be considered in selecting the method of therapy. Surgery is the method of choice if the lesion can be excised and the wound closed without grafting and without serious functional or cosmetic deformity. In such instances, surgery offers the

advantage of biopsy and elimination of the growth in one operation. The rapid healing and fine linear scar is much preferred to the weeks of acute radiodermatitis and a blanched circular scar. Radiation is usually indicated if surgical removal would entail skin grafting. In most instances the skin graft is not as cosmetically acceptable as is the scar from radiation and the necessity of hospitalization would make surgical treatment more expensive.

Surgery is preferred in areas lacking a pad of subcutaneous tissue and where the skin surface is closely applied to bone or tendons. Surgery is also the method of choice in eradicating lymph node metastases, recurrences following irradiation and if bone or cartilage is involved.

The location of the lesion is important in determining the method of treatment. Small lesions on the scalp may be excised or destroyed by electro-surgical methods. The larger lesions should be excised and grafted. Radiation is not the method of choice. Lesions of the ear are also best treated surgically. Most small lesions on the osseous portion of the nose can be excised and the wound closed but when closure is not possible, radiation gives cosmetically superior results. Lesions in the nasal fold and even small lesions over the cartilaginous portion cannot be excised without producing an objectional blemish. Radiation is the treatment of choice.

Cancerous growths at the margin of the eyelid canthus, or in close proximity of the tear duct are best treated by radiation. Surgical excision of even the smallest lesion produces a noticeable defect.

There is no preference of radiation or surgery in treatment of lesions of the cheek or lip. Both methods are acceptable and preference for either method is dependent upon the characteristics of the lesion other than that of location.

On the dorsum of the hand or foot, palmar or plantar surfaces, surgical excision with or without graft is the treatment of choice. Chronic radiation ulcers tend to occur where the soft tissue interposed between skin and bone is too scanty to absorb the radiation. A good graft on the palmar or plantar surfaces will withstand more trauma than a radiation scar.

Summary

Microscopic examination of all growths known or suspected of being cancer combined with adequate treatment by a method selected on the basis of the characteristics of the individual lesion will result in earlier diagnosis and fewer treatment failures.

TREATMENT OF EXFOLIATIVE DERMATITIS WITH CORTISONE AND ACTH

ROY E. SCHIRMER, M.D.
Fort Smith

A review of pertinent literature reveals several reports concerning the use of Cortisone in the treatment of exfoliative dermatitis, all of which were well controlled, and in which a maintenance dose prevented relapse.¹ I wish to report a case that relapsed under Cortisone and ACTH.

H. F. W.—A 48-year-old, white male, was admitted to a local hospital November 28, 1951, with a severe exfoliative dermatitis of the entire body. Pronounced exfoliation, numerous fissures, weeping areas, intense pruritus, and alternating burning and "freezing" sensations, were salient features of his disease.

In 1942, while working with tomatoes in a canning plant, the juice ran down into his rubber boots. He developed a weeping dermatitis on top of the right foot. A doctor dusted his foot liberally with a "Sulfa" powder and applied a bandage. Within twelve hours there was a marked flare of the dermatitis, which spread up the right extremity, and then subsided.

In 1944, he injured his left leg. Gangrene developed, and the leg was amputated at mid-thigh. The stump continued to drain in spite of various medications used; among them, a "Sulfa" ointment. A generalized exfoliative dermatitis developed, which has persisted in varying degrees. Everything from white oak bark poultices, arsenic, Hot Springs baths, and dozens of ointments were used; but nothing gave much relief. Serology tests were all negative.

On April 3, 1951, while the patient was in another hospital for his exfoliative dermatitis, the following brief summary is quoted:² "Sternal puncture—no evidence of dyscrasia. Universal exfoliative dermatitis, with constant shedding of large, dry scales. The underlying skin is red, moist, numerous fissures over exterior surfaces."

Seventy-two (72) hours after starting Cortisone, the following note was made: "The patient is getting a remarkable response to Cortisone. There is practically no exfoliation now. The skin is regaining normal color and texture. In addition, he feels greatly improved subjectively."

He was dismissed from the hospital and returned to his home. He continued to take Cortisone in from 100 to 150 mgms. daily, but in three weeks after his return home, he had relapsed. The dosage was increased to 300 mgms.³ and a marked

generalized edema appeared. The drug was stopped for one week, and the edema subsided. Cortisone was again started. For a period of eight months, with the exception of about three weeks, (rest for periods to let edema subside) he received from 100 to 300 mgms. daily.

On admission to a local hospital, November 29, 1951, the laboratory reports were as follows:

BLOOD

Chlorides 641 mgm %	Eosinophiles 14%
Total Protein 5.95 gm %	Lymphs 21%
Albumin 3.50 gm %	
Globulin 2.45 gm %	
A/G Ratio 1.4/1	Skin biopsy—Exfoliative dermatitis

With a prayer, I started him on ACTHAR Gel.* Usually individuals who have received Cortisone for four months or longer have a very definite temporary, or sometimes permanent, adrenal hypofunction.[†] This patient received Cortisone therapy for approximately seven and one-half (7½) months. He received from 20 mgm. to 60 mgm. of ACTHAR Gel (20 mgm., a.m.—40 mgm., p.m.). The second day on 60 mgm. doses, his circulating eosinophil count fell to zero from 1,650. Dosage was lowered and count returned to 660.

There was 80% improvement in his skin in 72 hours after receiving his first dose of ACTHAR Gel. (Total of 180 mgm.) Manifested by cessation of exfoliation, pruritus, weeping, and the loss of the alternating burning and "freezing" sensation. He was able to sleep all night without any sedation, and had a marked sense of well being.

Another miracle had happened. He went home Christmas a very happy man, with no exfoliation, and the skin was rapidly regaining normal color and texture. Since that time, due to finances he was without drug for few days, and he would rapidly relapse. A supply was secured.* He received from 40 to 100 mgms. daily. In about three months he again began to relapse. Dosage was increased; he continued to steadily grow worse. In May, 1952, he died from uremia with complete anuria, severe pulmonary edema, with failure of the right heart, complicating his exfoliative dermatitis. The ACTHAR was stopped two weeks prior to his death.

COMMENT

ACTH and Cortisone represent one of the most important developments in medicine in recent years. However, as evidence is accumulated, a more conservative attitude is adopted, since the drugs do not appear to cure any disease.

Remissions produced in a great many diseases reappear.

This patient, with a severe universal exfoliative dermatitis, received Cortisone and his recovery was dramatic; relapsed under therapy, which was pushed to tolerance (marked generalized edema). He received ACTH and made another dramatic recovery and again relapsed while receiving adequate therapy.

¹ Bettie M. West, M.D., "Treatment of Exfoliative Dermatitis with Cortisone," *Archives of Dermatology and Syphilology*, Jan., 1952.

Cortisone News, No. 9 of a series of skin conditions.

² Ray Fulmer, M.D., Little Rock, Arkansas. Personal communication.

³ E. L. Collette, M. D., Rogers, Arkansas. Personal communication.

* Most of the ACTHAR Gel furnished through the courtesy of Armour & Co.

[†] John M. Sheldon, M.D., Ann Arbor, Michigan. Personal communication.

OVARIAN PREGNANCY: REPORT OF A CASE

W. E. JENNINGS, M.D.
Rogers

Because ovarian pregnancy is one of the rarest forms of extrauterine conception the following case report may be of interest.

Mrs. C. J., a 25-year-old white female was first seen on April 3, 1948, complaining of excessive vaginal bleeding. There had been an irregular spotting since March 23rd. The last normal menstrual period occurred February 1st. Previously the patient had a 29-day cycle with five-day flow. She had never missed a period since the menarche.

Pelvic examination revealed a slightly enlarged uterus and a cervix which was soft and blue. A slightly enlarged, tender right ovary was noted. A diagnosis of threatened abortion was made. The patient responded well to conservative therapy until April 18, when bleeding again became severe. Because of passage of decidual material it seemed that an incomplete abortion had occurred and a dilatation and curettage was done with the removal of more decidual tissue. At the time of the dilatation and curettage and with the patient under anesthesia the right ovary was carefully examined and slight enlargement noted. It was felt that the ovarian enlargement was probably a retention cyst. Course following surgery was completely uneventful and without vaginal bleeding.

The morning of May 10, 1948, the patient had a sudden stabbing pain in the right lower quadrant

of the abdomen. When seen at 10 a. m. she was in mild shock. The lower abdomen was rigid. Rebound tenderness was present. Pelvic examination revealed a very sensitive mass to the right of the uterus. A diagnosis of ruptured ectopic pregnancy was made and laparotomy performed. A mass comprising the right ovary was removed. A considerable amount of blood was removed from the pelvis. The right tube was normal in all respects.

The pathological report by Dr. A. S. Koenig of Fort Smith was as follows:

Gross description:

The specimen consists of an irregular mass of tissue 6.2 x 5.8 x 4.7 cm. It has been incised, the incised portion closed by continuous sutures of chromic catgut. A portion of the surface is grayish white in color, another portion is nodular, a deep red purplish color. On section the central portion of the mass contains a cystic space which is lined by a smooth membrane and surrounded by an extensive zone of hemorrhage. Within the lumen of the cyst and attached to the wall is a small piece of tissue 5 mm. long which may represent an embryo. The tissue surrounding the cystic space is moderately friable when sectioned.

Microscopic description:

Sections of the ovary show massive hemorrhage into the ovarian stroma with necrosis of the tissue. The only remaining viable tissue is identified at the peripheral border of the specimen. Among the fibrin and blood there are small islands of decidual cells and trophoblastic villi.

Diagnosis: Ectopic gestation in right ovary.

September 16, 1952.

Dear Alumnus:

We are among the world's oldest professions. Our codes of ethics have had the test of literally thousands of years. The Hippocratic oath was in practical use long before the time of Christ. There is some suggestion of the oath even in Egypt, but it was the Greeks who developed it much as we know it today. This oath outlines the basic rules by which we conduct our profession. These rules have set us aside as men of principle, integrity, and service. It would be well that this oath be reviewed at intervals to remind us of our obligations to society. To clarify my intentions and make my point, I would like to quote from that impressive monument of ethics: "I will share my substance with him, and I will supply his necessities, if he be in need. I will regard his offspring even as my brethren and I will teach them this art, if they would learn it, without fee or covenant."

Through the centuries the meaning of these words have changed very little. We have a mutual obligation to each other and to our school to further the practice of better medicine in Arkansas and to protect ourselves from those who would like to make us into wheels of a machine to turn out government red tape. A great pillar of our past strength has been to build and maintain our institutions by our own standards. As never before, all physicians should take an active part in the education of our future physicians and protect them against controls from outside the profession. Your school needs all the help you can give to make it as strong as possible and out of the hands of some government agency, or department. One way to help is to support the alumni association, both by contribution and participation.

Fraternally,

Eugene H. Crawley, M.D.

RANDOM THOUGHTS OF THE SECRETARY

September 1st. "Thanks a million!"

PROCEEDINGS OF SOCIETIES

The Independence County Medical Society met August 11th for the following program: Charles Taylor, "Hypertension," and Mr. Abner Dunklin, "Report of the Rural Health Conference."

The Southeast Arkansas Medical Society and Auxiliary met at McGehee September 15th for a symposium on hypertension presented by S. C. Monroe, L. K. Hundley and W. K. Riley, all of Pine Bluff. Officers elected are: President, Robert Hyatt; Vice-President, Guy Robinson, and Secretary, M. C. Crandall.

The Tenth Councilor District Medical Society met in dinner session at Fort Smith September 9th for the following program: S. A. Drennen, Stuttgart, "Objectives of the Arkansas Medical Society," and Frank Padberg, Little Rock, "Acute Head Injuries." J. D. Olson, Fort Smith, was elected president, and G. K. Patton, Van Buren, was elected secretary-treasurer.

The Craighead-Poinsett County Medical Society met at the Jonesboro Country Club, September 3, 1952. Dr. Purvis Milnor, of Memphis, read a paper on "Recognition and Treatment of Curable Heart Disease," and Dr. Edward French, of Memphis, spoke on "Acute Intestinal Obstruction."

J. H. McCurry, Secretary.

President's Page

S. A. DRENNEN, M.D.
Stuttgart

Members:

I would like to discuss with you for a few moments an International Organization known as The International Labor Organization (I.L.O.). The proposals of this Organization having to do with health and sickness are just as poisonous or more so than Oscar Ewing's "Socialized Medicine Bill." To quote Marjorie Shearon: "State medicine looms large in I.L.O. plans for entire nations under worldwide socialism. The nine points covering state medicine are practically along the same lines of Mr. Ewing and his cohorts. These proposals will have to be presented to our Senate for action and it is well for us to keep ever alert for we do not want any alien interference with our internal affairs.

I have been rather skeptical about the Hill-Burton funds for hospital purposes if these Institutions are not able to function by reason of proper finances, what is to keep the Federal Agencies from stepping in and taking over. To again quote Marjorie Shearon. "Any community which accepts Hill-Burton funds on the condition that a combination medical and health center is to be developed should think twice about the overall pattern which the I.L.O. is advocating and which our Federal officials, who represent us at the I.L.O. are fostering.

Lord Horder, one of Queen Elizabeth IInd physicians in addressing the American and Canadian Chapters of the International College of Surgeons, recently urged that we Americans "avoid the blunder" of Socialized Medicine. He said that Briton's National Health Service Program had "failed" and as a result there is a lower standard of medical care. He asked the American doctors to "strive for unity" because he said the doctors disunity is the politicians opportunity. Politicians come and politicians go, but medicine goes on forever.

Now a word about Public Relations. At a recent two-day P. R. Meeting in Chicago, Arkansas was ably represented. I believe our profession is awakening to the fact that we must do a better job of meeting John Q. Public. Our professional relations (Grievance) Committee is going to play a big part in the future in bringing about a better understanding between our profession and the public in that the public when apprised of just what this Committee means to them—a place to go and air their grievances.

Let us all work for better Public Relations.

YOUR PRESIDENT.

EDITORIAL

VA HOSPITAL ELIGIBILITY RULES

The Veterans Administration announced on August 25 that veterans eligible for benefits in the hospitals will be admitted on the basis of the following nine new priority groups:

Group 1—War veterans and those with service since June 27, 1950 (post-Korea) who require hospitalization for service-connected disabilities.

Group 2—Peacetime veterans requiring hospitalization for service-connected or line of duty discharge disabilities.

Group 3—Veterans whose hospitalization has been requested by authorized officials for observation and examination purposes.

Group 4—Wartime, post-Korea and peacetime veterans with service-connected disabilities, or with line of duty discharges who are currently hospitalized by VA in non-VA hospitals, but have requested transfer to a VA hospital.

For Nonservice Ills

Group 5—Wartime post-Korea and peacetime veterans who are currently hospitalized by VA for treatment of nonservice-connected disabilities, but whose transfer from one hospital to another has been requested by authorized officials for medical reasons.

Group 6—Wartime, post-Korea and peacetime veterans with compensable service-connected disabilities or discharged for line of duty disabilities requiring hospitalization for nonservice-connected disabilities.

Group 7—Wartime, post-Korea and certain veterans retired from the armed forces for physical disabilities, having no compensable service-connected disabilities and not discharged for line of duty disabilities who require hospitalization for nonservice-connected disabilities.

Group 8—Non-veterans whose hospitalization has been requested by authorized officials, excepting U. S. armed forces personnel whose hospitalization is directed by the VA central office.

Simple Transfer Cases

Group 9—All eligible veterans currently hospitalized in another VA hospital who have requested transfer for personal reasons but whose transfer is not necessary for medical reasons; and certain eligible veterans whom VA has hospitalized in non-VA hospitals and who have requested transfer to VA hospitals for personal reasons but whose transfer is not necessary for medical reasons.

A VA spokesman stated that veterans who have no service-connected disabilities of any kind, but

want to enter VA hospitals by declaring they are unable to pay hospital charges elsewhere would fall in Group 7.

INTERNATIONAL LABOR ORGANIZATION

The ILO is an affiliated agency of the United Nations. It comprises over 60 active member-governments and its policy-making body is the International Labor Conference which meets annually. The general public and physicians in particular are unfamiliar with this organization. The last meeting of this body adopted a convention (treaty) on minimum standards of social security which, if ratified by the United States Senate, would establish "socialized medicine" irrespective of the wishes of the majority of the members of the Congress or of the American people. In the medical care section of this convention it is stipulated that a country ratifying the convention must provide a system of compulsory health insurance, or lacking this, there are the two alternatives: (1) private, voluntary health insurance administered by public authorities under established regulation, or (2) private, voluntary health insurance administered by insurance companies under government supervision.

Members are urged to read President Drennen's message in this issue of The Journal and to study the article on the ILO which appeared in the August 23rd issue of The Journal of the American Medical Association.

Danger lies ahead!

EDITORIAL CARDIAC SURGERY*

Many of us are aware of the fact that day after day we refer patients outside of Arkansas for diagnostic consultations or operations, which could well be done here in the State.

We refer particularly to the candidates for cardiac surgery, who have no way of knowing that all types of cardiac surgery are being successfully completed here in Arkansas. To many of us, this may come as fresh news. To others, who have heard about and have seen the quality of cardiac surgery being done here in Arkansas, it makes us want to tell everyone that Arkansas is abreast of other states in our surgical techniques and that cardiac surgery is not excluded.

Should your practice reveal a candidate for cardiac surgery, we strongly urge you to investigate the possibilities of having the surgery done here in Arkansas. We assure you that it is being done routinely and expertly.

* Contributed editorial from the Arkansas Heart Association.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

INTERNATIONAL HEALTH

By FRANK G. BOUDREAU, M.D.
American Journal of Public Health
December, 1951

Progress in the speed of travel and communication emphasizes the lesson of one world, but two widely contrasting worlds continue to exist side by side: the world of good health, long life, and high standards of living, and the other world of disease, hunger, and premature death. We who live in the healthy and prosperous world are outnumbered about three to one by those who do not happen to be so fortunate, and the disparity is growing. It would be folly to imagine that two such different worlds can continue to exist side by side in peace, for you cannot expect the peoples of the other world to be content to remain forever in the misery to which they have been condemned by the accident of being born in the wrong country.

Two courses are open to us. We may decide to isolate ourselves from the other world and arm to the teeth to defend our homes and our goods. We know by dearly bought experience that isolation is no longer possible, while history teaches that the armaments race leads inevitably to widespread war and that world wars reduce victors and vanquished alike to misery and ruin. Or we can resolve to assist the people of the other world to lift themselves out of their misery by helping them to develop their human and material resources.

Public opinion in our world of plenty is slowly forming in favor of the second course which is advised by economists as well as by conscience. The speed at which our world is being transformed requires us to act rapidly and with conviction. But our whole inclination is to temporize, to try to gain a little time, to put off the great decision.

This, then, is the framework in which we view our stake in world health; a world rushing faster and faster to its destiny, its people crowded closer and closer together but torn by hatred and haunted by fear, equipped with the most deadly weapons ever invented, and unable fully to understand or to influence human behavior.

The definition of the word "stake" is that found

in Webster: anything material or nonmaterial which we are in danger of losing. What, then, is our stake in world health, what are we in danger of losing if our support of the World Health Organization continues to be unimaginative and half-hearted?

We may lose the chance to rid the world of those ancient scourges which have afflicted mankind through the ages: malaria, plague, cholera, and yellow and typhus fevers. We may lose the chance to rid the world of the suffering and death caused by the worst manifestations of the major deficiency diseases: beriberi, scurvy, rickets, pellagra, and others less familiar to us. These diseases still number their victims in millions, yet are under control in the more advanced countries. We shall lose our chance to take part in the building up of a great stock pile of knowledge and experience in the maintenance of health and the prevention and treatment of disease. No nation has a monopoly of this knowledge and experience. We owe to German science the idea of synthetic drugs; penicillin came to us from Britain, insulin from Canada, DDT from Switzerland, the electrocardiograph from The Netherlands. Public health and modern medicine have been built up by the contributions of many workers in many lands. The stock pile is growing. Every day it becomes more valuable. Every day new useful knowledge is pouring out of research laboratories in many countries. Its use is often delayed by the barriers of language and man-made frontiers of prejudice and insularity. Breaking down these barriers is a task for which WHO is exceptionally qualified.

We may lose the opportunity to build up a world-wide united front for good health and disease control. In warfare and in disease control, no gaps must be found in the front facing the enemy, every sector must be held by first-class troops armed with the best weapons that science can provide. These armies are the health services and medical and health institutions in the different countries. Some are weak, undermanned, underofficered, and underequipped. In some countries they are virtually nonexistent.

WHO is engaged in building up this army of health. The least developed countries have the greatest need for more qualified physicians, more trained health officers, more nurses, more sanitary engineers. These countries also stand in greatest need of hospitals, medical and public health and nursing schools, research institutes, health centers, and many others. It will take time to provide them, but in a cooperative world a start may be made at once. Every increase in the number of trained health workers will bring added efficiency in the fight against disease; every moment that we hesitate to support world health means unnecessary suffering and death to men, women, and children in many countries.

We may lose the chance to build peace into the minds of men. Our present age is characterized by aggressiveness and competition. These qualities may have been necessary for survival when food production could not keep pace with population growth, but they are anomalies in the industrial and scientific world of today. Our problem is to make the challenge of peace appeal to men more strongly than the excitement of war. Progress in the development of new lethal weapons of war far exceeds the rate of advance in our understanding and control of human behavior. We do not allow a child of five to take the throttle of a great locomotive but minds just as immature are likely to be found in control of far more lethal forces.

The challenge of the times is to sublimate man's aggressiveness into vigorous cooperative action toward building a world society in which opportunities for health, long life, rising standards of living, and freedom will be open to men, women, and children of every race, creed or country. Our present aggressiveness and competitive spirit must give way to compassion, sympathy, and cooperation. WHO's present programs for mental health need to be developed and expanded until they cover the earth. Combined with education they may turn out to be keys to the solution of our most pressing problem—how to build peace into the minds and hearts of men, how to adapt man's behavior to the conditions and complications of the new world in which he lives.

The World Health Organization is peculiarly fitted to become the spearhead of a world revolution which will have as its aim not the destruction of present civilization, but the organization of a peaceful world, not the leveling down of all countries to lower standards of living, but the raising up of the poorer countries to the standards of the most healthy and prosperous. This is within our grasp; we have the ability and the means to

do it; only the will falters, only the imagination fails.

The preamble to the Charter of the United Nations begins with the words, "We, the peoples of the United Nations. . . ." These words were used to emphasize that the new world must be built by peoples as well as by governments. The initiative of the National Health Council in setting up a United States Citizens' Committee will give the people of our country an opportunity to work for world health as the spearhead of a movement for the organization of world peace. It will give professional health workers the privilege of taking the lead in meeting the most exciting and momentous challenge mankind has ever faced.

PERSONALS AND NEWS ITEMS

Keith Hester, formerly of Danville, has located at Gurdon.

E. J. Byrd, Camden, has been elected in the Democratic primary to represent the twelfth district in the Arkansas Senate.

D. P. Hefner has located for practice at Hickory Ridge.

Married—On August 7th, at Pocahontas, Dr. George E. Mitchell and Miss Betty Henning.

Edwin F. Gray and Joseph D. Calhoun announce the association with them in the practice of radiology at Little Rock of Joe B. Scruggs.

T. H. Hickey of Russellville has joined H. E. Mobley in practice at Morrilton.

H. E. Leming has moved to his office building at 114 East Spring Street, Fayetteville.

The following were announced as contributors to the American Medical Education Foundation during August: Chas. W. Anderson, Pine Bluff; Louis A. Cohen, Little Rock; T. N. Durham, Jr., Hot Springs National Park; L. T. Evans, Batesville; Fred Hames, Pine Bluff; P. Leo Hathcock, Fayetteville; C. Lewis Hyatt, Monticello; Robert F. Hyatt, Monticello; John A. Martin, Cabot; Joseph A. Norton, Little Rock; Fount Richardson, Fayetteville; B. N. Saltzman, Mountain Home; John W. Smith, Little Rock, and A. R. Sparks, Little Rock.

Coy C. Kaylor and James D. Mashburn have moved to their new office building at 212 North College Avenue, Fayetteville.

Contributions have been announced to the American Medical Education Foundation from A. H. Maddox, Paragould; E. D. McKelbey, Paragould; Deane D. Wallace, Little Rock; B. A. Bennett, Little Rock; M. V. Black, Little Rock; S. A. Drennen, Stuttgart; Henry G. Hollenberg, Little Rock, and John M. Hundley, Little Rock.

BORN—On August 11th, Thomas David, to Dr. and Mrs. S. M. Wilson, Rogers.

The council on Medical Education and Hospitals of the American Medical Association in concurrence with the American Board of Urology has announced the approval of a three-year residency program in urology at the University of Arkansas School of Medicine. The program is under the direction of Dr. James W. Headstream.

WOMAN'S AUXILIARY NEWS

Miss Beverly Johnson, Fayetteville, was selected by the Washington County Medical Society Auxiliary to receive assistance to enter nurses training. Miss Johnson, a 1951 graduate of the University High School, is a nurses aide at the County Hospital. She will receive \$100 annually from the Auxiliary's loan fund until she becomes a registered nurse. She will enter training this fall in Arkansas Baptist Hospital, Little Rock.

The Washington County Medical Auxiliary met Friday afternoon, September 12 at 1:30 p.m. for a luncheon at the Washington Hotel, honoring Mrs. Gordon P. Oates, State President of the Woman's Auxiliary to the Arkansas Medical Society. Seventeen members were present and Mrs. Ed Wheat and Mrs. LeMon Clark were introduced as new members.

After lunch there was a business meeting with Mrs. Spencer Brown, President, presiding. A program on rural health was discussed, after which Mrs. Oates talked to the Auxiliary. She gave a report on her attendance at the annual meeting of the American Medical Association in Chicago. She explained her plans for the coming year and clarified duties of the various committee chairmen.

The meeting adjourned with plans for the next meeting to be in Springdale, October 10, 1952.

Mrs. Preston Brogdon,
Public Relations Chairman.

OBITUARY

B. L. BAILEY, age 80, Star City, died August 10th. A native of Louisiana, he graduated from the Memphis Hospital Medical College in 1898. He was an honorary member of the Arkansas Medical Society and a member of the Fifty-Year Club. Surviving relatives are two daughters and three sons.

WILLIAM V. NEWMAN, age 47, Little Rock, died August 15th after a long illness. Born in Little Rock, he attended Union University and Washington University and graduated in medicine from Vanderbilt University School of Medicine in 1930. He served an internship at Strong Memorial Hospital, Rochester, New York, and served a residency at Cook County Hospital, Chicago. He was a diplomate of the American Board of Orthopedics, a Fellow of the American Medical Association, a member of the American Academy of Orthopedics and of the Clinical Orthopedic Society, chief of staff of the Orthopedic Section at the Arkansas Children's Hospital, a member of the Sigma Alpha Epsilon fraternity, an Associate Professor of Orthopedics at the University of Arkansas School of Medicine and a member of the First Methodist Church. Surviving relatives are his wife, two sons and a daughter.

CHARLES A. ARCHER, age 76, DeQueen, died August 29th. Born August 20, 1876, at Princeton, he graduated from the University of Illinois College of Medicine in 1904 and began practice at DeQueen in 1907, establishing DeQueen's first hospital and operated it until 1949. He was a charter member and past-president of the DeQueen Rotary Club and a member and elder of the First Presbyterian Church. He served as president of the Arkansas Medical Society, had been president of the Sevier County Medical Society and of the Arkansas State Board of Health. He had been a member of the State Medical Board of the Arkansas Medical Society and was a division surgeon for the Kansas City Southern Lines. Surviving are his wife; a son, Dr. C. A. Archer, Jr., of Conway, and a daughter, Mrs. E. H. Wilkes, Little Rock.

One university has recently graduated sixteen epileptics from its regular courses.¹ Two have received their Doctor of Philosophy degrees, and three have received their Master of Arts degrees. One is now an assistant professor, another has his own business, and all are gainfully employed.

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ANXIETY NEUROSIS AND THE PROGNOSIS OF HEART DISEASE *

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Russellville

The primacy of heart disease as a cause of death is likely to be maintained as far as we can see for the indefinite future unless armed conflict should alter the existing relationships. More than 9,000,000 people in the United States have some form of cardiovascular disease. This is of necessity an estimate, but a relatively accurate one. As the chief cause of death in the United States it is responsible for more deaths than the next five causes combined. Two major influences have brought the death rate from heart disease to its leading position in this country in the past thirty years. These influences might well be considered the results of our civilized progress. The first is the marked reduction of other causes of death, particularly those due to infantile diarrhea and infections, communicable diseases, tuberculosis, and infectious diseases in general. The second influence is directly related to the first—that is the increase in life expectancy has resulted in a relatively increased number of persons living over the age of fifty-five years, thereby having reached the time of life in which the so-called degenerative cardiovascular changes take place. This is the responsible factor for the increased importance, and there has not been an absolute increase in the incidence of cardiovascular disease if correction is made for the increased life expectancy (which is now more than sixty-eight years average).

The three most important forms, accounting for about ninety per cent of all heart disease, are rheumatic heart disease, arteriosclerotic cardiovascular disease, and hypertensive cardiovascular disease. Rheumatic fever and the resulting rheumatic heart disease affects primarily the younger ages. Its greatest incidence is in the five- to fifteen-year-old group, and it is the leading fatal disease between the ages of five and nineteen years. Rheumatic heart disease has quite properly been called childhood's greatest enemy. No other childhood disease rivals it as a cause of death and invalidism. Unfortunately the cri-

pling results of the disease cannot be readily seen upon ordinary inspection as is the case with certain other diseases, but a study made in an area of the northern portion of the country revealed that rheumatic fever and heart disease caused five times as many deaths as meningitis, whooping cough, poliomyelitis, measles and diphtheria combined. Arteriosclerotic cardiovascular disease fortunately causes the largest number of its deaths in the seventy to seventy-nine years age group. Hypertensive cardiovascular disease occurs in some of its severe forms in the young adult age group, but from a statistical standpoint affects chiefly persons in the middle and older age group. The outlook for a number of years of life without serious difficulty is good for persons having hypertension. There are other forms of cardiovascular disease, the most notable being congenital heart disease and the cardiovascular infections, subacute bacterial endocarditis. These are less common than the three principal types, but are important and represent a group in which the therapeutic possibilities seem increasingly promising.

In a recent publication Gillespi¹ said: "There is a chapter omitted from medical textbooks which might be headed 'Iatrogenic' (Gr. *latros*,¹ doctor) Diseases'; that is to say, diseases produced by doctors. It is not well enough realized that it is dangerous to give a label to a set of symptoms of disease until you are convinced that it is the right one. If a syndrome is psychologically produced (which of course the patient does not know) and if the doctor also does not know this and calls it gastritis because the patient complains of indigestion, or a weak heart because he complains of breathlessness or precordial pain, then he has implanted a suggestion in the patient's mind which fixes his anxiety in a way which, if not quite indelible, is at any rate very hard to undo."

The advance of clinical knowledge has definitely limited the scope of iatrogeny.¹ In all our experiences we have seen patients whose symptoms had been incorrectly diagnosed as evidence of pathologic processes in nearly every bodily system. However, one system—the cardiovascular—has been predominate. As early as 1926

* Read before the Seventy-sixth Annual Session, Arkansas Medical Society, April 23, 1952.

Viko² described cardiac neuroses initiated by physicians in cases of organic heart disease and in 1929 Kilgore³ described cardiac neuroses with no pathologic findings. Oille⁴ has summed it up well by stating that almost 60 per cent of patients who consult a cardiac specialist are suffering from either an exaggerated or a wholly unnecessary anxiety about their hearts, arising from suggestion and not based on reason.

From time immemorial the heart has been the traditional seat of the emotions and hence acts as the focal point of anxiety. The anxiety neurosis in its varying degrees, according to Weiss,⁵ is probably the most frequent disorder of civilized life. It has long been known that anxiety attacks produce disturbances of cardiac function such as palpitation, arrhythmia and tachycardia, also disturbances of respiration and other body systems, yet not always accompanied by recognizable anxiety. The presence of cardiac symptoms directs attention toward the heart. The psychic reaction to doubt concerning the integrity of the heart, Conner⁶ has said, seems to be much more violent and profound than is the case with any of the other internal organs. Most persons who would accept with considerable equanimity the knowledge that they had some disease of the liver or kidneys or lungs will have their morale sadly shaken by any evidence that the heart is not functioning properly. In the minds of most laymen the thought of heart disease is still associated with the idea of sudden and unforeseen death.

Conner has outlined the four groups of causes which may act as the precipitating events for the development of cardiac neurosis: (1) the statement of some physician or life insurance examiner that the heart shows some abnormality, (2) the occurrence of some dramatic case of heart disease (such as sudden death) among relatives or friends of the patient, (3) the appearance of symptoms calling attention to the heart, such as sudden pain or a skipped beat, and (4) some profound and protracted emotional disturbance, such as deep grief or prolonged anxiety. Oille has described these patients as sensitive or suggestible with a past or family history of nervous excitability. They usually have a pessimistic type of mind; that is, they take a serious view of their symptoms or what people tell them and are unable to forget or disregard unfavorable remarks about their health. The majority of this anxiety group is made up of people who have a pain somewhere which they think is in their hearts or due to their hearts.

Kilgore has stated that the physical signs often

responsible for mistaken diagnoses of cardiovascular disease are benign murmurs and arrhythmias, simple tachycardia and temporary elevation of blood pressure from the excitement of a medical examination. The symptoms giving rise to error are those designated as neurocirculatory asthenia and effort syndrome. Summing it up, he feels that the disability of masquerade heart disease is almost always due to fear which usually comes from suggestion. The readiness of physicians to diagnose heart disease on the basis of an audible murmur is responsible for many cases of cardiac neurosis. He has said that a systolic murmur can be found in a considerable proportion of healthy young adults if they are examined in various postures, in different phases of respiration, before and after exercise. In the absence of supporting findings or history they should not be regarded as pathologic, the diagnosis of valvular disease being held in abeyance until radiographic and electrocardiographic studies have been made.

Another error is that of some physicians who tell patients that they have "functional heart disease," "nervous heart" or "pseudoangina." As far as the patient is concerned, the physician is diagnosing a form of heart disease. If it was explained that the cardiac symptoms are due to nervousness but not due to any actual heart disease, such misunderstandings would not arise. Similarly, the use of diagnoses such as "athlete's heart" or "effort syndrome" imply to the patient that an actual disease entity is present.

There is a tendency to recommend rest in bed as a general measure in patients exhibiting anxiety tension symptoms with resultant exaggeration and fixation of symptoms. In patients with anxiety about their heart the doctor's advice to rest in bed or "take it easy" confirms their worst fears.

Next to preoccupation about the heart there is universal concern about blood pressure. The layman's ideas about blood pressure, accentuated by the impressive apparatus and technic, have given it an air of portentous meaning. Nearly every patient is anxious as to the results of this examination and places much importance on it. The glib use of the phrase "high blood pressure" or "low blood pressure" by the examining physician, without any careful explanation of its significance, may be the focal point of an anxiety state. It is indeed surprising to find the number of neurasthenic or depressed patients whose condition was ascribed to low blood pressure, if their blood pressure determinations tended to be in the lower ranges of normal variation. Similarly,

many patients showing a slight elevation in pressure are told that their pressure is increased, even though the anxiety accompanying such examination is well known and might in itself be the cause of the elevation.

Even reliance on the electrocardiogram as a diagnostic aid may be a source of error. It has been shown that the anxiety tension state classed as the hyperventilation syndrome may show electrocardiographic changes which could lead the unsuspecting physician to diagnose heart disease. An awareness of the possible changes due to hyperventilation would obviate such a possibility. Recently a married woman aged 21 was seen in the outpatient department of the University of California Hospital complaining of precordial pain and breathlessness for which no organic pathologic condition could be found. An electrocardiographic record showed changes suggesting heart disease. However, the examining physician felt that a hyperventilation syndrome might account for the whole clinical picture. He was able to reproduce the entire symptomatology by the hyperventilation test. Psychiatric study revealed marital discord plus guilt feelings regarding a permarital sexual escapade. Fortunately he recognized the picture and so avoided the initiation of a cardiac neurosis.

At times the doctor, anxious to have a patient carry out his orders or submit to an operation, will unduly stress possible untoward effects if these measures are not followed through. While it is justifiable to mention that heart disease may be a possible consequence of neglected, diseased tonsils or sinuses or other toxic foci, it is unfair to imply that it is an invariable result of continued neglect. One patient was told, at the age of 15, that unless his "diseased tonsils" were removed he would be dead of heart disease in five years. He is still alive and healthy at the age of 30, still with the same infected tonsils—but with a cardiac neurosis.

Again, the indiscriminate use of medications in the anxious patient all too often have a deleterious effect. Digitalis is made use of because the physician feels that in small doses it might do some good if, by chance, any slight heart disease should be present. Since most patients learn sooner or later that digitalis is a specific cardiac medication, they assume that they are being treated for heart disease. Frequently other cardiac drugs are used. At times the patient misconstrues his sedative mixtures as being specific cardiac drugs. In fact, the use of any medications or even placebos may lead to misconceptions unless their purpose is explained.

It cannot be too strongly emphasized that, since cardiac symptoms may occur in neuroses of all types and even in psychoses, they are only the presenting symptoms of a more fundamental disorder—the individual's inability to handle his personal and environmental problems. The physician, limiting his attention to the cardiac symptoms, permits the major personality disorder to escape unnoticed and helps to fix the anxiety at a somatic level.

While anxiety cases showing cardiac symptoms are less frequent in the present struggle compared to World War I, they still are common and present a major problem. In his Foulstonian Lectures on the effort syndrome Wood⁸ pointed out that a number of the cases in his series had been induced. The accidental finding of a systolic murmur or of tachycardia was usually the source of error. Evidence of predisposition was common. Given the suggestible subject, the doctor often succeeded in linking emotional reactions to effort by grafting on the mind of the patient the idea that his heart would not stand up to exertion. Douglas-Wilson⁹ found cardiac symptoms the most common somatic manifestations in a group of psychoneurotic soldiers. The induction of symptoms by suggestion through prolonged confinement to bed or by doctors' or relatives' warnings was found in 14 of the group of 53 cases. It was noted that, whatever the reason for the patient's having been confined to bed—it varies from head injury to "nervous breakdown"—the patient himself had supposed that it was because of "something wrong with the heart." Not one of the patients that had been instructed to "take things easy" had sought further advice after the initial warning.

In addition to these cases recognized as cardiac manifestations of a psychogenic disorder there are countless numbers incorrectly diagnosed. Lewis,¹⁰ in reviewing the studies at Hamstead estimated that about five-sixths of the British Army diagnoses of organic heart disease were erroneous. Commenting on this, Kilgore stated that in the United States service many diagnoses of mitral insufficiency myocarditis, angina pectoris and the like were mistakenly entered in the records and carried forward as grounds for disability ratings long after the passage of years and accumulating evidence should have removed any doubt of the original diagnostic errors. Considering the great number of men incorrectly labeled as suffering from "heart disease," the extent of the illness so created is indeed appalling.

In the face of a problem of this magnitude two things seem essential for further progress. First,

there must be broader knowledge of cardiovascular disease. Particular emphasis should be placed on the unanswered questions concerning etiology and other pathologic physiologic changes related to the development of cardiovascular disease and the failure of the cardiovascular mechanism. The second essential point is fuller application of existing knowledge. To accomplish these goals a great deal must be done.

Research seems the only approach to the problem of increasing the existing knowledge of cardiovascular disease. There should be no slackening of effort in this field; in fact it should be increased and facilitated. Only by such continuing effort will the mysteries of the origin of rheumatic fever, the etiology of coronary sclerosis and hypertension; and the causes of congenital malformations be solved. Much progress has been made: surgical correction of congenital defects, antibiotic therapy for subacute bacterial endocarditis, ACTH and cortisone in acute rheumatic carditis; surgical treatment of hypertension, and anticoagulant therapy in coronary and other vascular occlusions, but much progress remains to be made.

As regards the fuller application of existing knowledge nothing excels education as a means of accomplishment. The need for education is widespread. It has been said that the fate of the patient suffering from cancer rests in the hands of the first physician he consults. This may also be applied to many heart disease sufferers. Not only must there be increased dissemination of existing knowledge among the members of the medical profession, but also increased facilities available for assistance in diagnostic study, specialized and comprehensive management.

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ACCIDENTS—THE CHIEF CAUSE OF DEATH IN CHILDREN *

JOSEPH L. ROSENZWEIG, M.D.
Hot Springs National Park

It is my sincere hope that all of you are more aware of the importance of accidents as a cause of morbidity and mortality than I was when my interest first was aroused sometime ago. Although this paper is concerned primarily with accidents in children, we must be cognizant of the importance in all age groups. No one is immune, and most of the points of pediatric interest which we shall discuss have a parallel in all other age groups.

Recitations on statistics are quite soporific to most audiences; nevertheless, it is necessary to employ some here to present the magnitude of the accident problem. In 1950, 90,000 persons in the United States died as the result of accidents, a mortality rate of 60 per 100,000.¹ As a cause of death, only cardiovascular disease and cancer have prior rank. The number of battle casualties in World War II killed, wounded, and prisoners combined equal about one-eighth of the accidental injuries in the United States in 1950.¹ If we consider causes of death by age groups, we find accidents ranking fifth for those 45 years and over; second to heart disease in the 25-44 year group, and the leading cause in the 1-25 year group.¹ Every year 11,000 children between the ages of 1 and 14 lose their lives by accidents, with the highest accident fatality rate between 1 and 5.¹ Accidents kill two times as many of these young children as measles, scarlet fever, pertussis, diphtheria, dysenteries, tuberculosis, and poliomyelitis combined.¹ Yet, all of us have had experience with parents who "know" every upper respiratory infection means their child has poliomyelitis, but who allow their children to experience many more dangerous accident hazards without a second thought.

Such a discussion may give the impression that accidental deaths are on the increase, but that is not true. Accidental fatalities are decreasing, but are doing so at a much slower rate than that for various diseases. The prominence of mortalities from accidents is due partly to the improvement in general mortality rates. This is particularly true for our younger age groups.

Now let us survey the types of accidents that cause these deaths—and we refer primarily to the young (1-4 year) age group. Motor vehicles are the leading cause, accounting for about 36% of all fatal injuries.² Many of these occur on the

* Read before the Seventy-sixth Annual Session, Arkansas Medical Society, Little Rock, April 22, 1952.

highways, but too large a number happen on the neighborhood streets and driveways. Burns and conflagration rank second, and their total makes up 28% of the accident mortality.² In the one-year old infants burns and conflagration take over the first rank by a wide margin of victory. Such mishaps are most frequently the result of being trapped in a burning building, spilling or falling into hot liquids, playing with matches, etc. Third in our list comes drownings, which make up over 11% of the fatal cases.² It is interesting to note that the peak incidence of drowning is in the 2-year-old group, and that many of these fatalities occur in and around the individual homes. Poisoning, falls, and choking on foreign bodies complete the list.²

The above data refer to only fatal accidents, and give only a rough idea of the true magnitude of the problem. Dr. Rustin McIntosh likens this to an "iceberg situation" in that there is a lot more to the problem than that part which shows above the surface.³ It is estimated that for every death from a home accident, there are 150 disabling injuries. The loss in time and money because of such non-fatal accidents is enormous, but more pertinent is the fact that the circumstances building up to a non-fatal injury may differ from those leading to death by an extremely small factor.

The National Safety Council has done a tremendous job in developing organized safety movements in nearly every community. Industry, schools, motor clubs, and civic clubs all have safety programs. We, as physicians, have a large part to fulfill in bringing about a lowering of accident mortality and morbidity. Doctors, with their special access to the very young and the very old, among whom the home accident problem is the greatest, have a responsibility and an opportunity to prevent accidental trauma. Physicians must learn to think of accidents in terms of prevention as well as treatment. We not only must reduce the fracture, but also question its cause so as to help prevent repeat performances. People will listen to and value such guidance. Our contribution is one of education—education of parents of infants and children whom we see every day in our practice. Accidents don't "just happen." It is estimated that 90 per cent of accidents are preventable, and that 80 per cent of accidents involving children are due to acts of omission or commission by adults.³

In 1948, the American Academy of Pediatrics in cooperation with the United States Children's Bureau, the Metropolitan Life Insurance Company, and the National Safety Council undertook

a special educational effort to bring the child accident problem to the fore in the minds of physicians. At present there is an Academy committee dealing with child safety from accidents. State pediatric societies throughout the nation are instituting their own programs. Our neighboring states of Louisiana and Texas are already well on their ways. The Child Welfare Committee of the Arkansas Medical Society has taken the accident problem as its chief project for this year, and will call upon all practicing physicians within the state to assist in making the program a success. Without the interest and help of all medical men, our part in this enormous problem will be a failure. As a member of that committee I ask you all first to take time and evaluate the magnitude of this problem, and then to help in all possible ways to make the program successful. This is not a task for pediatricians alone, but for all who practice medicine. Accidents constitute a major problem for all age groups. Too, studies have shown that 70 per cent of the child care in the United States is in the hands of general practitioners.⁴ This group has played a major role in lowering the disease mortality in children, and must play another leading role in decreasing accident mortality. Our profession strives to prevent sickness and death. As our country's health continues to improve, more and more emphasis will be placed on prevention rather than cure. As we have taught the public the value of immunization against disease, we must teach them the importance of immunization against accidents.

A program of accident prevention has a multitude of ramifications. It would be ridiculous to attempt in this brief period to cover even a small portion of the field. Its scope includes just about everyone and everything, and I have not tried to touch upon many particular points. Rather, I have presented the problem to show its importance, and to emphasize the part which we doctors must play in solving it. In closing, I ask you to give it adequate thought, and to lend every possible effort in this cooperative project.

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THE MANAGEMENT OF CHRONIC PULMONARY INSUFFICIENCY *

Including a Preliminary Report on the Use of Expiratory Positive Pressure Oxygen Therapy

W. O. ARNOLD, M. D., and R. J. CARABASI, M. D.
Temple, Texas

Advances in pulmonary physiology during the past five years have provided a clearer understanding of the mechanical and chemical factors involved in pulmonary insufficiency due to emphysema, pulmonary fibrosis, cystic lung disease, etc. Patients with pulmonary insufficiency can now be treated in a more rational manner, and practical results can be obtained. Management should consist of a program with two fundamental aims: (1) overcoming the various physiological and anatomical defects in the diseased portion of the lung, and (2) restoration and preservation of normal function in the remaining, healthy lung tissue. The second of these aims is of no less importance than the first, for it is upon the remaining good lung tissue that the patient is dependent for breathing.

In this paper, we present our program for treating patients with pulmonary insufficiency. The regimen is based on observation of patients over a period of several years. Expiratory positive pressure oxygen therapy is a recent addition to the program and has been of marked benefit to a small number of patients. A preliminary report on its use is included.

Program of Management

1. **Oxygen.** Just as elsewhere in the body, the capillaries of the lungs are susceptible to anoxia, and anoxia results in increased capillary permeability and subsequent edema. The lung capillaries have a most important peculiarity in that the **capillary endothelium** in the alveoli **depends on alveolar air for its oxygen supply.** The pulmonary capillaries, unlike those of the rest of the body, do not dip into the general pool of oxygen brought by the arterial blood. Their blood is venous through the pulmonary artery. **They are in the singular position of depending for the bulk of their oxygen supply upon the oxygen reaching them through the many divisions of the bronchi and bronchioles.**¹

In some patients with pulmonary insufficiency there is diminished tidal exchange due to bronchiolar plugging by stagnant secretions, bronchial spasm, loss of elasticity of the lungs and probably other factors which are as yet unrecognized. These conditions produce localized anoxia and, we believe, consequent localized pulmonary edema in areas of relatively normal lung tissue which have been carrying the burden of respiratory function. In addition, sustained increased capillary pressure in the pulmonary circulation may be a factor in the development of pulmonary edema in these patients.

For the past nine months, we have been using **expiratory** positive pressure oxygen in treating patients with chronic pulmonary insufficiency. Expiratory positive pressure, aside from overcoming focal pulmonary edema and relieving pulmonary hypertension, produces bronchial and bronchiolar dilatation and relief of spasm.² It is probable that this type of positive pressure therapy also improves collateral respiration through Loosli's alveolar pores. Expiration against slight positive pressure might be thought to produce increased pressure in the already distended lung tissue of the patient with emphysema or cystic lung disease. This may be true; but if there are any deleterious effects, they are certainly minimal for breathing exercises which employ the use of expiratory positive pressure have been used for years with no untoward results. It is an interesting observation, too, that the patient with emphysema, through the use of his accessory muscles of respiration and the expiratory grunt, practices expiratory positive pressure breathing of his own accord.

The apparatus we have used is the O.E.M. meter mask,* metered for expiratory positive pressure. This mask was originally devised for treating pulmonary edema of heart failure and edema due to lung irritants, but we have found it to be an effective implement in the treatment of pulmonary insufficiency. The mechanical features of this mask have been adequately and briefly described elsewhere.³ Its construction is simple and compact and the details of its use are easily learned. The cost is minimal. The complete mask including gauges costs about \$60.00, and each oxygen treatment costs about 15 cents.

The procedure followed was the administration of 100 per cent oxygen at 4 cm. of pressure with the flow determined by the patient's needs. The mask was used from twice daily to every two

* From the Department of Internal Medicine and the Department of Medical Diseases of the Chest of the Scott and White Clinic (Dr. Arnold); and Resident in Medicine of the Scott and White Memorial Hospitals and the Scott, Sherwood and Brindley Foundation (Dr. Carabasi).

* O.E.M. Corp. (Oxygen Equipment Manufacturing Corporation), Fitch Street, East Norwalk, Conn.

hours for 20 to 30 minutes, depending on the degree of dyspnea and functional incapacity of the patient. At dismissal, the majority of patients were using the mask in the morning, once during the afternoon, and in the evening before retiring. Mid-day treatments could be eliminated with no increase in dyspnea or fatigue in some instances. Because pulmonary edema is an ever-present dangerous consequence of oxygen lack and of prolonged pulmonary hypertension, and bronchial spasm is a constant feature in these patients, it is felt that continued daily use of expiratory positive pressure oxygen therapy is indicated.

Continued oxygen therapy with the O.E.M. meter mask has been used by 17 patients with all types of pulmonary insufficiency including emphysema and cystic lung disease. Fifteen patients have shown improvement; one patient had no change; the other patient expired at home, probably from asphyxia, four days after leaving the hospital. The 15 patients have maintained their improvement since dismissal from the clinic, or have improved further. By improvement we mean an increase in appetite, strength, and feeling of well-being; less fatigue and tension; and the ability to breathe more easily and to perform activities which previously had been difficult or impossible. In one patient, this meant being able to do a full day's work as a clerk, whereas on admission he had been unable to work at all. In another, it meant being able to walk half a block with comfort and ease. Prior to admission, he could walk only a few steps, and on admission he was absolutely bedfast and in respiratory acidosis.

As yet, we have no elaborate pulmonary function tests to statistically prove our results in this type of oxygen therapy. However, the majority of physicians throughout the country are without these laboratory procedures and must also rely on clinical judgment and observation.

The use of oxygen in no sense restricts the patient to activity in or about the premises where a large cylinder is kept. If an inexpensive adaptor is obtained, small cylinders which fit an average-sized suitcase can be used with the mask. Although the cost of each oxygen treatment is proportionately higher when the small cylinder is used, freedom of activity for the patient is not limited.

Positive pressure therapy with the O.E.M. meter mask differs from other positive pressure therapy. Intermittent positive pressure breathing (IPPB) with **inspiratory** positive pressure has

been employed with beneficial results, but patients are usually treated only a short period of time and then dismissed without further oxygen therapy. Since the pathological changes in the lungs are irreversible and pulmonary physiology is constantly being altered, we believe that treatment must be continued to prevent or delay the inevitable outcome of asphyxia. In addition, the equipment necessary for intermittent inspiratory positive pressure breathing is rather costly, complicated, and not easily adaptable for home use.

Shock is the one contraindication to the use of the O.E.M. meter mask. Positive pressure therapy of any type produces a diminished venous return to the heart; in shock this hazard is already present and must not be furthered. In respiratory acidosis, oxygen administered by any method must be given cautiously. In this circumstance, hypoxia is the condition which has been activating the aortic and carotid bodies to reflexly stimulate respiration. High concentrations of oxygen given too rapidly may abolish this activity and apnea is likely to occur.

2. **Rotary Postural Drainage.** In patients with chronic pulmonary insufficiency there is destruction of elastic fibers in the lung; fixation of the bronchi and bronchioles; loss of smooth muscle tone; and destruction of the ciliary epithelium. These conditions favor the formation of small bronchiolar plugs which produce local bronchospasm and mechanical obstruction, and there is serious interference with the movement of air into and out of the bronchopulmonary segment distal to the plugged bronchiole. Localized areas of alveoli are blocked with resultant hypoxia and anoxia and consequent localized areas of pulmonary edema.

The mechanical defects of the bronchial tree are overcome by the use of **rotary postural drainage**. For this type of postural drainage, the patient is placed on a light cot or bed with the foot of the bed elevated about eight inches so that the thorax is at a 30-35 degree angle. The patient is instructed to lay on his back, sides, and stomach for five to eight minutes in each position; the whole process thus requiring only 20 to 30 minutes. The procedure should be practiced at least twice daily, preferably in the morning just after awaking and in the evening just before retiring. Since the bronchioles are directed in many different ways—horizontally, vertically, and in all degrees of obliquity between—such a method of rotation facilitates drainage from most of the bronchopulmonary segments.

Rotary postural drainage has been found superior to the old method of postural drainage in which the patient leaned over the side of the bed with the head practically touching the floor. Patients practicing the old method of drainage often did not cooperate long as the position was uncomfortable and complaints of headache and dizziness were frequent. Patients with chronic pulmonary insufficiency are usually in the older age group and tolerate such a procedure poorly. The angle which we have employed achieves comfort and, at the same time, is therapeutically effective.

Results in some instances are rather dramatic but, for the most part, are not evident until after a week or two of continued application of the procedure. It is important for the physician to bear in mind and to explain to the patient that many of the bronchial plugs are extremely small (since the bronchioles are 1.5 mm. or less in diameter) and that large amounts of secretion may not be visible. Frequently, these small plugs are expectorated several minutes or hours later, so that the patient is often unaware that he has drained the bronchial tree. Persistent application of rotary postural drainage for several days will result in symptomatic improvement in most instances, and the patient will not need visible evidence of copious amounts of secretion to convince him of its value.

In addition to overcoming the mechanical defects of the bronchial tree, rotary postural drainage is useful also in promoting lymphatic drainage from the lung. The direction and amount of lymph flow is dependent on gravity, tissue pressure, intrathoracic pressure and forces applied by massage and movement of the part involved. We believe that rotary postural drainage facilitates lymphatic drainage by these mechanisms.

3. **Medications.** Because of bronchospasm, the loss of peristaltic activity of the bronchial tree, and loss of ciliary action, bronchial secretions are static and tend to become thick. The use of aminophylline and iodide preparations help overcome these conditions. Aminophylline, when given on an empty stomach, has been shown to be an effective bronchodilator.⁴ We prescribe it in dosages of 3 grains, orally, 30 minutes before meals and at bedtime. Other bronchodilators may be used. A saturated solution of potassium iodide helps liquefy a tenacious sputum. It may be given in the usual amount three times a day for a week or two and then omitted for a week in order to avoid iodism. If the patient develops an acute upper respiratory infection or bronchitis, it

should be omitted entirely as the iodides are excreted by the bronchial glands and may produce more irritation of the respiratory mucosa.⁵ When bronchitis or other respiratory infections occur, these patients should receive antibiotic therapy, including aerosol penicillin, as prophylaxis against secondary invaders.

If cor pulmonale exists and congestive failure is present or imminent, digitalis is indicated and prescribed in the usual manner.

4. **Abdominal Belts and Pneumoperitoneum.** A simple procedure which may be carried out to determine if abdominal pressure will be helpful consists of standing behind the patient, placing the hands and arms over the abdomen, making pressure, and then walking in step with the patient. Patients with a fixed diaphragm seem to be benefited the most. If an abdominal belt is used, it is important to instruct the patient to put it over the abdomen only and not to include the lower portion of the thoracic cage.

The introduction of pneumoperitoneum in cases where it is practical for the patient to return for refills may accomplish the same end as the use of an abdominal belt.

5. **Rest and Activity.** Rest in bed or inactivity promotes the retention and stagnation of secretions and contributes to stasis in the pulmonary circulation and should be discouraged. Furthermore, the object in treating these patients is to restore them to some degree of useful activity, or, at least, to furnish them with some degree of comfort in carrying out the routine activities and necessities of every day living. To urge a sedentary existence upon them is to contribute to the hopelessness and helplessness which they already feel.

6. **Smoking.** Smoking should be prohibited at all times in order to minimize bronchial irritation with associated bronchospasm and increased secretions.

Summary and Conclusions

1. Successful results in treating patients with chronic pulmonary insufficiency can be effected through a combination of several procedures directed against the underlying physiological and anatomical defects and toward restoration and preservation of function in the remaining healthy lung tissue.

2. Therapy is aimed at overcoming and preventing focal pulmonary edema, the removal of bronchial plugs, the relief of bronchospasm, the promotion of lymphatic drainage, and increasing collateral respiration.

3. With the armamentarium of expiratory positive pressure oxygen therapy, rotary postural drainage, the use of bronchodilators, antibiotics, abdominal belts, pneumoperitoneum, and the omission of smoking, improvement may be expected in the majority of patients.
4. Chronic pulmonary insufficiency is irreversible and progressive, or, at best, static. Therapy must be understood by the patient and practiced persistently.

References

¹ Drinker, C.K.: **Pulmonary Edema and Inflammation**, Cambridge, Harvard University Press, 1945, pp. 8, 29.

² Barach, A. L., and Swenson, P.: Effect of Breathing Gases under Positive Pressure on Lumens of Small and Medium Sized Bronchi, Arch. Int. Med. 63:946-948, May, 1939.

³ Barach, A. L., and Molomut, N.: An Oxygen Mask Metered for Positive Pressure, Ann. Int. Med. 17:820-821, Nov., 1942.

⁴ Barach, A. L.; cited by Bickerman, H. A. and Beck, G. J.: Physiological Factors in the Treatment of Chronic Hypertrophic Pulmonary Emphysema, Ann. Int. Med. 36:607-624, Feb., 1952.

⁵ Goodman, L., and Gilman, A.: **The Physiological Basis of Therapeutics**, New York, The Macmillan Company, 1941, p. 817.

TENTATIVE PROGRAM FOR
SCIENTIFIC SESSION OF ANNUAL
CONVENTION FOR 1953 FOR THE
ARKANSAS STATE MEDICAL SOCIETY

Day: Monday
Date: April 20, 1953
Type of Morning

Program:	General Session
9:00 to 9:30 A.M.	9:00 to 9:10 Invocation 9:10 to 9:25 President's Address
9:30 to 10:00 A.M.	Dr. George E. Burch of New Orleans, Louisiana—"Internal Medicine"
10:00 to 10:30 A.M.	Dr. Samuel T. Haines of Rochester, Minnesota—"Internal Medicine"
10:30 to 11:00 A.M.	Dr. John B. Youmans of Nashville, Tennessee—"Internal Medicine"
11:00 to 11:30 A.M.	Dr. Emil Novak of Baltimore, Maryland—"Obstetrics & Gynecology"
11:30 to 12:00 Noon	Dr. Allen C. Barnes, Columbus, Ohio—"Obstetrics & Gynecology"
12:15 to 1:45 P.M.	Internal Medicine Luncheon with Dr. Owen Beard presiding Obstetrics & Gynecology Luncheon with Dr. Charles Henry presiding

Type of Afternoon	
Program:	Symposia
2:00 to 5:00 P.M.	Symposium on Internal Medicine with Dr. Sanford Monroe presiding
Participants:	Dr. George E. Burch, Dr. S. T. Haines, Dr. John B. Youmans

Symposium on Obstetrics & Gynecology with Dr. Clyde Rodgers presiding
Participants:
Dr. Emil Novak, Dr. A. C. Barnes, Dr. Willis Brown of Little Rock, Ark.

Day	Tuesday
Date:	April 21, 1953
Type of Morning	
Program:	General Session
9:00 to 9:30 A.M.	Dr. H. W. Scott of Nashville—"Surgery"
	Symposium—Eye, Ear, Nose & Throat
9:30 to 10:00 A.M.	Dr. Eugene Bricker of St. Louis—"Surgery"
	Symposium—Eye, Ear, Nose & Throat
10:00 to 10:30 A.M.	Dr. J. Garrott Allen of Chicago—"Surgery"
	Symposium—Eye, Ear, Nose & Throat
10:30 to 11:00 A.M.	Dr. Katharine Dodd of Little Rock—"Pediatrics"
	Symposium—Eye, Ear, Nose & Throat
11:00 to 11:30 A.M.	Dr. Kenneth Blanchard, Baltimore, Maryland—"Antibiotics"
11:30 to 12:00 Noon	Memorial Services
12:15 to 1:45 P.M.	Pediatrics Luncheon Presided over by Dr. Robert Henry Eye, Ear, Nose, Throat Luncheon Surgery Luncheon Presided over by Dr. Martin Hawkins Eye, Ear, Nose, Throat Luncheon

Type of Afternoon	
Program:	Symposia
2:00 to 5:00 P.M.	Pediatrics Symposium Dr. Eugene Crawley presiding Participants: Dr. Katharine Dodd, Dr. John S. McKinney, Dr. Robert Hand Symposium—Eye, Ear, Nose & Throat Symposium—Surgery Dr. S. W. Hawkins presiding Participants: Dr. H. W. Scott, Dr. Eugene Bricker, Dr. J. Garrott Allen Eye, Ear, Nose & Throat Symposium
7:15 to 12:00 P.M.	Buffet Dinner & Dance


Day	Wednesday
Date:	April 22, 1953
Type of Morning	
Program:	"What's New" Symposium Presided over by Dr. Kenneth Thompson of Fort Smith, Arkansas
9:00 to 9:30 A.M.	Nothing scheduled.
9:30 to 10:00 A.M.	Surgery—Dr. James Growdon of Little Rock, Ark.
10:00 to 10:30 A.M.	Medicine—Dr. Charles Thompson of Texarkana
10:30 to 11:00 A.M.	Obstetrics & Gynecology—Dr. John Walter Jones of Texarkana
11:00 to 11:30 A.M.	Pediatrics—Dr. J. O. Cooper of El Dorado
11:30 to 12:00 Noon	Skin—Dr. Raymond P. Hughes of Texarkana



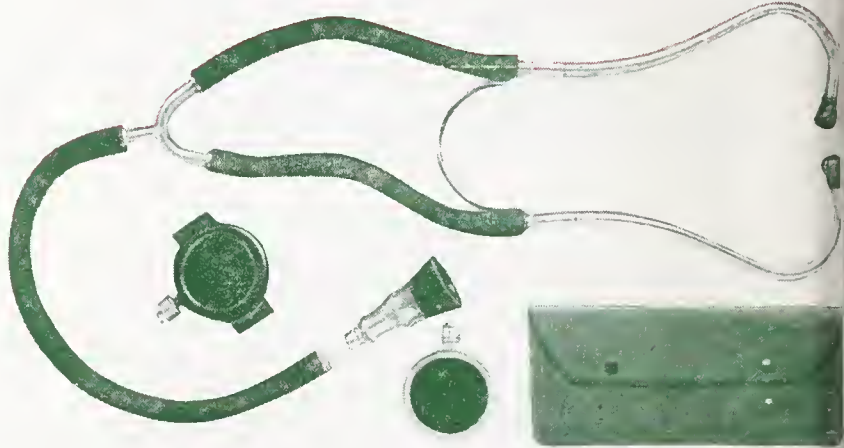
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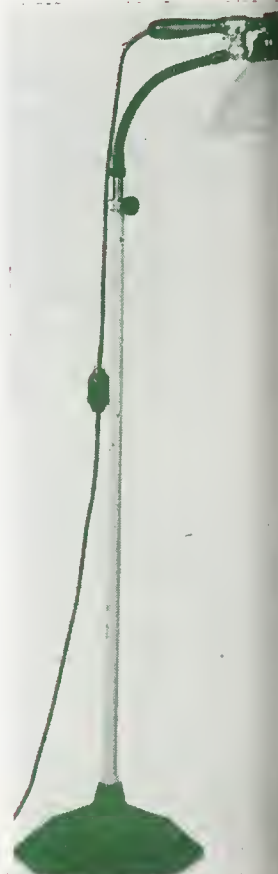
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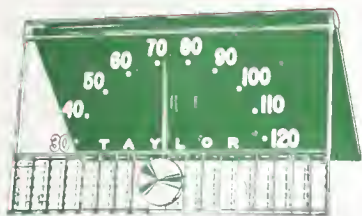
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EDITORIAL "MITRAL STENOSIS AS VIEWED BY THE INTERNIST"

ALFRED KAHN, JR., M.D.
Little Rock

The fundamental problem in mitral stenosis is not difficult. Consider it this way; the heart is a pump. In buying a farm water pump, the main point of interest is how many gallons per minute the pump will put out. That is the fundamental thing any alert buyer or salesman will want to know. The heart, to be effective as a pump, usually keeps a resting cardiac output of about 3.0 liters per square meter of body surface per minute; if one exercises, this so-called cardiac index may go above 4.0 liters per square meter of body surface per minute; patients with mitral stenosis may not have any increase in cardiac output after exercise. In mitral stenosis, inflammation has placed an internal barrier in the pump, which acts as a diaphragm to cut down the cardiac output. To attract attention to this fundamental physiological problem, mitral stenosis has been called a "dam" disease.

By an ingenious approach, the Brigham Hospital workers have found that as long as the mitral dam had a one square centimeter opening through it, serious symptoms might not appear. If the mitral valve opening was smaller than one square centimeter, symptoms of a serious nature occurred. In addition to the physiological symptoms, serious pathological lesions may occur in the lungs as a result of the damming back of blood; the vascular tree may be permanently damaged (pulmonary fibrosis) in long standing, severe cases and surgery is of no avail here. The question that then arises is how are we to know the extent of the blood barrier in the mitral stenosis without being able to look at the valve.

It is the internist's problem to detect mitral stenosis and to determine then whether or not the case is suitable for surgery. After the rheumatic process attacks the mitral valve, verrucous vegetations and scarring set in. Perhaps the earliest evidence of chronic mitral valvulitis is a snapping first sound. As the pathological process produces more injury, a systolic murmur is often heard. Later comes the diastolic murmur of mitral stenosis. The mitral stenosis murmur is characteristically harsh and mid-diastolic; if the heart is not fibrillating, there is a pre-systolic accentuation, due to the increased blood flow, with auricular systole just prior to ventricular systole. The murmur is associated with a palpable apical thrill. To bring out a doubtful murmur, the patient may be exercised. Often this murmur can be heard

only with the patient in the left lateral decubitus. The murmur may be localized to a small area.

Other contributory evidences of mitral stenosis are: right axis deviation of the electrocardiograph, auricular fibrillation, compression of the esophagus by the large left auricle (readily demonstrated fluoroscopically) hemoptysis, hoarseness, etc.

The fact that a patient has mitral stenosis is not an argument for surgery; surgery is indicated in certain selected cases only. The following criteria are acceptable in determining if the case is suitable for commissurotomy. The patient should show definite functional impairment as: fatigue and early exertional dyspnoea; do not wait for this to progress to such symptoms as hemoptysis. Surgery is usually performed in young adults; although age is not an absolute bar. The lesion should be pure mitral stenosis; patients who have mitral regurgitation are unsuitable and are made worse by surgery. X-ray studies of the heart should show a straightening of the left border and esophageal compression. The electrocardiograph should show right axis deviation. There should be no serious complications as: Congestive failure, or serious arrhythmias, although auricular fibrillation does not constitute a contra-indication per se; some surgeons dislike to operate on patients who have had emboli; since this is a disputed point, patients who have had emboli should be carefully evaluated.

Progress in cardiac surgery has focused the attention of the medical profession and the lay press on mitral stenosis. It is therefore extremely important that all physicians make an effort to recognize mitral stenosis. If the patient is well compensated, the physician should observe the patient intermittently and attempt to prevent recurrences of respiratory infections, which might lead to acute rheumatic fever. If the patient has begun to show early evidences of decompensation, due to the mitral dam, then evaluation for cardiac surgery is urgently indicated.

"YOUTH LOOKS AT CANCER"

Among the least publicized of the educational program activities of the Arkansas Division, American Cancer Society, is the appreciation of the importance of cancer education in our schools. There are many valid reasons why the youth of our state should become acquainted with the cancer problem. Obviously, the high school student of today is the potential cancer patient of the next generation and he should acquire knowledge

which will lead him to a more helpful and healthful life. The youth, informed on the early signs and the course of cancer, will exert a favorable effect on the thinking of his parents which will influence these adults to seek proper early care when suspicious signs develop.

While the community may help in the protection against cancer by providing the educational activities which the Cancer Society seeks to make available throughout the state, the vital item in the recognition and recovery from cancer is a matter of individual attainment. This the individual must recognize and secure. The extent to which he will apply the protective measures will depend in great degree on how effective his education has been. High school students will accept teaching about cancer as general helpful information without the emotional responses which too often attend the thinking of adults on this question.

Some figures on the youth educational program will be of interest. Of the 328 consolidated high schools in Arkansas, 250 are using the text, "Youth Looks at Cancer," furnished by the Arkansas Division, American Cancer Society. Of these, 85% use the text for classroom study; the others keep the book as a library reference. Approximately 10,000 copies of the text are now in use in Arkansas. Physicians may obtain a copy of the text on application to the Arkansas Division, American Cancer Society, 88 South 4th Street, Fort Smith.

"TO ALL MY PATIENTS"

This small, but effective placard, is making a place in many Arkansas physician's offices. It should be in many more. It modestly serves as a phase of public relations with patients. It offers the patient an opportunity to discuss the subject which he most fears to bring up with his physician. With its help, the economic aspects of medical care may be sympathetically and satisfactorily handled between patient and physician before the obligation is incurred.

The Journal hopes that each member of the society will procure one of these placards from the Order Department of the American Medical Association and place it in a vantage point in his office. Good will be engendered at a small cost of one dollar, the price of the placard.

SPARKS FROM THE SECRETARY

September 1. The above term "Sparks" decided upon for these comments because it seems that something ought to result when an ordinary person gets his nose down to two grindstones. We were afraid to use Bill Brooksher's title of "Random Thoughts of the Secretary"—he might sue us for "slander."

September 15. First experience at trying to fill Brooksher's shoes. Appeared as representative of A.M.S. to present Health Needs of People of Arkansas to the President's Commission on Health Needs at St. Louis—all in ten minutes. How can a Hearing be a Hearing when the Commission member turns off his hearing aid? Was chilled and not thrilled by the realization that certain Social Service Planners despise the medical profession. We felt that we must do all we can to get doctors to realize that the Social Planners are still after us hot and heavy.

September 26. Spent all this day listening and looking with Paul Schaefer and Bill Brooksher in Fort Smith trying to absorb (1) as much of Bill's knowledge as possible in one day and (2) absorbing a steak paid for by Brooksher. (3) Finally escaped Brooksher by being Pine Bluff team's doctor at the Ft. Smith-Pine Bluff football game.

September 28. Vacationing in old home town of Alva, Oklahoma, and privileged to attend Woods County Medical Society where yours truly gave them the full Oklahoma statement to the President's Commission on health needs. Dr. McDonald's (Tulsa's O.M.A. President-elect) statement was the best in the group.

October 9. Journeyed to the 5th District meeting at Camden, enjoying the hospitality of Councilor White, "Top Brass" Robins and many other friends. Stole film from Bob on propaganda against A.M.S. put out by the C.I.O. This recalls the saying that "a nation cannot have a little bit of socialization any more than a man can be a little bit dishonest or a woman can be a little bit pregnant." This film is the most subtle at patting you on the shoulder and knifing you in the back that the average practitioner will ever see.

October 13. Unlike the good attendance at the 5th District, the 2nd District meeting at Newport was poorly attended, although, Kumpuris and Ray Fulmer gave an A-I program. Showed stolen film here.

October 15. Attended 1st District Meeting at West Memphis, viewing with awe and amazement the beauty of Crittenden Memorial Hospital, which has truly equal facilities for colored and white. Excellent program, entertainment and food. C.I.O. film shown again. McDaniels invited 1st District to Tyrone 3rd Thursday, May, 1953—program already set up and you can bet it's a good one!

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TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

THE TUBERCULOUS DIABETIC PATIENT

By MICHAEL A. FERRARA, M.D.

The New England Journal of Medicine, January 10, 1952

A total of 3,178 patients with pulmonary tuberculosis were admitted to the Uncas-on-Thames Tuberculosis Hospital from July 1, 1937, to July 1, 1950. Of these, 68 or 2.1 per cent had associated diabetes mellitus. This study is concerned with the course of tuberculosis in these diabetics and with their present status.

Many writers believe that some peculiar relation exists between diabetes mellitus and tuberculosis and that the diabetic is more prone to develop tuberculosis than is the nondiabetic. Some authorities have stated that the prevalence of tuberculosis is more than three times as high among diabetics than among the general population. It has been shown that the frequency of pulmonary tuberculosis in diabetics at autopsy appears to be at least two to four times as great as it is in nondiabetics. The mortality from tuberculosis among diabetics has shown no fall comparable with the fall in rate among the general population. The causes of the increased susceptibility of diabetics to tuberculosis and of these patients' poor resistance to their disease after it has developed (if this is true) are not known. Numerous explanations of this have been offered, but to date the answer is still conjectural. Hyperglycemia, acidosis, increased glycerol production, altered function of the leukocytes and tissues in general and lowered pulmonary concentration of phospholipids and lipids have all been advanced as possible causes.

Early recognition and prompt treatment of tuberculosis in the diabetic is, of course, of great importance if this condition is to be arrested in a higher proportion of diabetics than has heretofore been true. It has been stated that the average life expectancy of a tuberculous patient with diabetes is barely half what it would be in one with tuberculosis uncomplicated by diabetes.

Tuberculosis discovered in the minimal stage in a diabetic is rare. This is shown in the literature and is corroborated by this study. Of 68 patients studied only one had minimal tuberculosis. Of

the remaining 67 cases, 16 or 24.6 per cent were moderately advanced and 51 or 75 per cent were far advanced. Of the 68 patients, 53 have been discharged and 15 are still hospitalized. Of the 53 discharged, 35 are known to be dead, two are alive with active tuberculosis, the disease has been arrested in 11 for a period ranging from six months to nine years and five are untraceable. Of the 15 cases still hospitalized, seven have active tuberculosis, unimproved, and the disease of eight is active, improved. It would appear, then, that the prognosis for the patient with tuberculosis and diabetes is poor—and worse than for the patient with tuberculosis alone.

The diabetes did not militate against the use of any form of therapy for any of the patients in this study, and all forms of tuberculosis therapy were used as indicated. Usually, the diabetics with tuberculosis did not respond to treatment as well as did the nondiabetics. In the great majority of cases, the end result was either death or a long course of hospitalization with slowly progressing tuberculosis.

The X-ray appearance of the tuberculosis in this series of diabetics was not significantly different from that in nondiabetics.

The diabetes was mild in 11 per cent, moderate in 28 per cent and severe in 61 per cent of the cases. It was diagnosed prior to the discovery of tuberculosis in 47 or 69 per cent and after tuberculosis developed in five or seven per cent of the cases. The two diseases were diagnosed together in 16 or 24 per cent of the total. Table I shows the duration of diabetes prior to the development of tuberculosis.

TABLE I
Duration of Diabetes Prior to the Development
of Tuberculosis

Duration of disease	Number of patients
0- 2 years	8
3- 5 "	15
6-10 "	15
11-15 "	6
16-20 "	2
21-25 "	1

Frequent routine X-ray examination of the lungs of all diabetics would uncover tuberculous lesions in earlier rather than advanced stages and might well improve the prognosis for their tuberculosis.

The blood sugar was kept below 150 mg. per 100 cc. wherever possible; this was achieved in the majority of cases. No significant relation was noted between the degree of control of the diabetes and the course of the patient's tuberculosis. The diabetic status of the 11 arrested cases was no different from that of the majority of the other 57 patients.

More than two-thirds of the patients were over forty-four years of age. The older diabetic should not receive X-ray examination less frequently than others merely because of age. Table 2 shows how long those who died lived after their tuberculosis was diagnosed. Only three patients lived longer than six years; 50 per cent died within two years.

TABLE 2

Duration of Life After Tuberculosis Was Diagnosed	
Duration of life	Number of patients
0-1 year	9
1-2 years	10
2-3 "	5
3-4 "	5
4-5 "	—
5-6 "	3
6-7 "	—
7-8 "	2
8-9 "	1

Conclusions

Of 3,178 patients admitted to the Uncas-on-Thames Tuberculosis Hospital with pulmonary tuberculosis from July 1, 1937, to July 1, 1950, 68 or 2.1 per cent had associated diabetes mellitus. Of the 68 patients, 53 were discharged and 15 are still hospitalized. Of the 53 discharged, 35 are known to be dead, the disease has been arrested in 11 for periods ranging from six months to nine years, two are living with active tuberculosis and five are untraceable. Of the 15 patients still hospitalized, the disease of seven is active, unimproved, and the disease of the remaining eight is active, improved.

The prognosis for the tuberculous patients who have diabetes is graver than for the tuberculous patient who does not have diabetes.

All diabetics should have a chest X-ray examination at least every six months—or more often, if signs or symptoms warrant more frequent X-ray examination of the chest.

OBITUARY

ERNEST J. HORNER, age 61, Jonesboro, died suddenly October 5th. Born at Yellville, where he was visiting relatives at the time of his death, he attended the University of Oklahoma and graduated from the University of Arkansas School of Medicine in 1918 entering military service with the army medical corps. He located at Jonesboro after the close of World War I and had continuously served as post surgeon of the Jonesboro post of the American Legion since its founding. He was a member of the First Presbyterian church. Surviving are his wife and a son.

PROCEEDINGS OF SOCIETIES

The Tri-State Medical Assembly meeting at Texarkana October 2nd and 3rd was addressed, among others, by Katherine Dodd, Little Rock, "Jaundice Problems in the Newborn and Child"; Anderson Nettleship, Little Rock, "Pathology of Hepatitis and Allied Conditions," and B. B. Wells, Little Rock, "Hepatitis and Jaundice in the Adult." F. G. Thibault, El Dorado, is president of the Assembly and John W. Jones, Texarkana, is Arkansas vice-president.

The Fiftieth meeting of the First Councilor Medical Society was held in West Memphis, October 15th, under the following officers: President, C. D. Tibbels, Black Rock; Vice-president, L. C. McVay, Marion, and Secretary-treasurer, J. H. McCurry, Cash. Speakers were A. C. Parker, Clarkedale; C. D. Tibbels, Black Rock; S. A. Drennen, Stuttgart; David S. Carroll, Memphis; R. A. Rasking, Memphis; G. B. Higley, Memphis; V. A. Hall, Memphis; R. L. Henry, Memphis; D. H. Autry, Little Rock; J. A. Buchanan, Little Rock, and Deane D. Wallace, Little Rock. Officers elected are: President, Gilbert D. Jay, West Memphis; Vice-president, R. H. Ray, Earle, and Secretary-treasurer, J. H. McCurry, Cash.

The Prairie County Medical Society has elected the following officers: President, Gerald Schumann; Vice-president, Ruby Jones; Secretary-treasurer, J. C. Gilliam and W. M. Parker, delegate.

The Pope-Yell County Medical Society was addressed October 9th in dinner session at Russellville by Wilburn Hamilton, Little Rock, on "Cardiac Emergencies."
William O. Young, Secretary.

The Sebastian County Medical Society was addressed October 14th by Mr. Marvin Altman, Fort Smith, on "The Doctor and the Hospital."

G. E. Simpson, Secretary.

The Craighead-Poinsett County Medical Society met at Jonesboro October 2nd for the following program: "Remarks on Poliomyelitis," P. W. Turrentine, Lepanto; "Newer Concepts of Prostatic Affections," Fountain B. Moore, Memphis, and "Surgery of the Thyroid," George R. Livermore, Memphis.

J. H. McCurry, Secretary.

Participants in the Southwestern Surgical Congress at Dallas October 20-22nd, were J. Harry Hayes, Little Rock, "Management of Goitres, with a Report of Over 1,500 Thyroidectomies"; John W. Jones, Texarkana, Panel on Gynecology, and Louis P. Good, Texarkana, discussant. Officers from Arkansas are Louis P. Good, Texarkana, President, and Fred H. Krock, Fort Smith, Councilor.

Joe F. Shuffield and Elvin Shuffield, Little Rock, were guest speakers at the meeting of the Tri-County Medical Society held at Prescott September 16th.

The Arkansas chapter meetings of the American College of Surgeons and of the Southwestern Surgical Congress were held at Hot Springs National Park August 22nd with the following among the speakers: T. P. Foltz, Fort Smith, "Tumors of the Neck," and S. W. Hawkins, Fort Smith, "Acute Abdominal Emergencies." Officers elected to the Arkansas chapter of the American College of Surgeons were W. G. Cooper, Little Rock, president, and Peter O. Thomas, Little Rock, secretary.

The Arkansas Academy of General Practice met in its fifth annual fall assembly at Little Rock October 10th and 11th under the presidency of Harry E. Murry, Texarkana. The following program was presented: "Recent Advances in the Management of the Border-Line Pelvis," Willis E. Brown, Little Rock; "Recent Advances in the Management of Stress Urinary Incontinence in Women," G. C. Sutherland, Little Rock; "Recent Advances in the Early Diagnosis of Cancer," James E. Growdon, Little Rock; "Pseudo-Endocrinopathies," James Wortham, Little Rock; "Recent Advances in the Management of Diabetes in Children," Katherine Dodd, Little Rock, "Discussion of a General Practice Program in the Medi-

cal School," Hayden C. Nicholson, Little Rock; "Recent Advances in the Management of Upper Extremity Fractures," L. L. Thompson, Little Rock; "Recent Developments in the Effects of Drugs on the Vascular System," L. D. Seager, Little Rock; "Recent Advances in the Treatment of Convulsive Disorders," Wm. K. Jordan, Little Rock; "Cardiac Anomalies with Clinical and Autopsy Correlations," A. W. McCullough, Little Rock; "Psychotherapy in General Practice," Wm. G. Reese, Little Rock; "Recent Advancements in Pathology," Anderson Nettleship, Little Rock; "Complications of the Newer Antibiotic Therapy," Morris Dumoff, Little Rock, and "Some Problems of the University of Arkansas," Hon. John T. Caldwell, Fayetteville. An evening banquet session with R. B. Robins, Camden, as toastmaster, was addressed by Coach Otis Douglas, Fayetteville.

PERSONALS AND NEWS ITEMS

Meyrl Grasse has located for practice at Calico Rock.

Dr. and Mrs. E. J. Highfill, Cave Springs, celebrated their golden wedding anniversary August 31st.

W. W. Workman has located for practice at Blytheville.

A. R. Hederick, Booneville, has been awarded the Fifty-Year pin of the Society.

W. S. Rainwater, Hampton, has been called to active duty with the army medical corps.

D. W. Goldstein and W. R. Brooksher, Fort Smith, conducted a diagnostic cancer clinic at Ozark October 1st under the sponsorship of the Franklin County Medical Society and the Arkansas Division, American Cancer Society.

D. W. Goldstein, Fort Smith, addressed the Northeast Oklahoma Medical Society at Muskogee September 22nd on "Unusual Skin Lesions."

Dr. and Mrs. Joe Verser, Harrisburg, spent a recent vacation in Florida and Cuba.

F. Q. Wyatt, Batesville, has been elected a Fellow of the International College of Surgeons.

A. M. Washburn, Little Rock, recently received a certificate of appreciation for twenty-five years of service to the Arkansas State Board of Health.

Ralph A. Downs, Fort Smith, addressed the Rogers Memorial Hospital staff October 13th on "Metabolic Causes for Renal Calculi."

James W. Headstream, Little Rock, and Frank G. Kumpuris, Little Rock, received Fellowship in the American College of Surgeons at the recent New York meeting.

Charles Walls, formerly of Ola, has located at Des Arc.

W. J. Ketz, Batesville, Grand Master, Arkansas F. & A. M., dedicated the cornerstone of the new lodge building at Judsonia recently.

Wm. J. Rhinehart, Little Rock, addressed the Arkansas Society of X-ray Technicians at Texarkana November 1st on "The Qualities of a Good Radiograph."

Training schools of the Arkansas Division, American Cancer Society were addressed during October at Harrison, H. V. Kirby; at Paris, G. R. Siegel, Clarksville; at Jonesboro, Grover Poole; at Forrest City, Max Roy; at Searcy, J. J. Monfort, Batesville; at Hamburg, Julius Hellums, Dumas; at Little Rock, I. Meschan; at Camden, W. H. Handley, El Dorado; at Texarkana, J. W. Jones, and at Malvern, W. F. Barrier.

Announced as contributors to the American Medical Education Foundation during September were: E. M. Gray, Mountain Home; James Guthrie, Camden; M. C. John, Jr., Stuttgart; H. E. Murry, Texarkana, and L. H. Siegel, Fayetteville.

G. Allen Robinson, formerly of New York, has located in Harrison for the practice of radiological therapy.

The song "Petit Jean" by Bernie Babcock, has been dedicated to T. W. Hardison.

F. F. Ferguson and E. V. Dildy have formed the Dildy-Ferguson Clinic at Nashville.

Neil Compton recently addressed the Bentonville Rotary club.

D. W. Goldstein, Fort Smith, recently addressed the Northwest Arkansas Dental Association on "Oral and Lip Lesions."

Earl Parsons has moved to new offices at 314 Cross Street, Little Rock.

J. H. McCurry, Cash, has received the Golden "T" of the University of Tennessee.

F. B. Milwee, Little Rock, has moved to McCrory where he will be associated with George Napper.

Ralph A. Downs, urology, and Cecil F. Boulden, internal medicine, have joined the staff of the Cooper Clinic at Fort Smith.

E. E. Estes has been elected president of the Redbug Booster Club at Fordyce.

A. H. Maddox has been elected medicin of the Paragould voiture, Forty and Eight.

Dr. and Mrs. D. W. Goldstein, Fort Smith, spent a recent vacation in Bermuda.

WOMAN'S AUXILIARY NEWS

The Southern Medical Association meets in Miami, Florida, November 10-13, 1952, with the following schedule:

Sunday, Nov. 9	—Special Executive Committee Meetings
Monday, Nov. 10	—Luncheon for Past Presidents Luncheon for Councilors
Tuesday, Nov. 11	—Executive Board Breakfast General Sessions Doctors Day Luncheon Other social activities, including a Fish Fry on the beach
Wednesday, Nov. 12	—General Sessions Luncheon honoring the President, Mrs. V. Eugene Holcombe; and the President-Elect, Mrs. Richard F. Stover, and Visiting State Presidents and charter members
Thursday, Nov. 13	—Executive Board Banquet

The Auxiliary to the American Medical Association will furnish two of the speakers. Mrs. Ralph B. Eusden, President of the Auxiliary to the A.M.A., will discuss the aims and general program of the Auxiliary, and Mrs. John McCuskey, a Vice-Chairman, will speak on nurse recruitment.

Wives attending the Southern Medical Association meeting with their husbands are cordially invited to attend all activities of the Auxiliary.
All reservations should be made early.

The Second State Rural Health Conference held in August was a tremendous success, with over six hundred attending the Conference. Mrs. J. B. Crawford, State Rural Health Chairman for the State Auxiliary with the assistance of Mrs. Fred Harris, Rural Health Chairman for Pulaski

County Medical Auxiliary; Mrs. Mason Lawson, Treasurer of the Woman's Auxiliary to the American Medical Association as advisor and planner; Miss Helen Robinson, Extension Health Education Specialist, University of Arkansas; and members of the Auxiliary to the Arkansas Dental Association did a grand job on handling registration, banquet decorations, and information desk.

The Arkansas Medical Society with Dr. S. A. Drennen, President; Dr. Charles Henry, Chairman of the Advisory Committee, Dr. Arnold Henry, Chairman of the State Rural Health Committee, are to be commended for the outstanding success of the Conference, the Auxiliary was glad to have a part in such a worthwhile project.

The Executive Board of the Women's Auxiliary to the Arkansas Medical Society met for its Fall Conference in the Continental Room of the Hotel Marion in Little Rock, September 22nd.

The business session opened at 10:00 A.M., with Mrs. Gordon P. Oates presiding. Twenty-two members were present.

Reports of officers and committee chairmen were read. Mrs. Mason G. Lawson gave a report of the Annual Conference of the Woman's Auxiliary to the American Medical Association. At that meeting in June, Mrs. Lawson was elected Treasurer and Mrs. Louis K. Hundley was named Regional Chairman on Public Relations. Mrs. Lawson called attention to a change made in the Constitution which provides that a member of the American Medical Association, provided she is also the wife of a physician, may become an associate member of the A.M.A. Auxiliary. Her status on local levels may be determined by the individual county organizations.

The Board voted that a state Chairmanship of the American Medical Educational Foundation be established and that it be carried through on a county level.

Also passed was a resolution that the Auxiliary go on record as favoring legislation for the completion and operation of the Medical Center.

At the noon luncheon, Dr. Dan Autry, Chairman of the Advisory Council, was guest speaker.

At one o'clock Mrs. Oates called the Conference into session for a discussion period. Mrs. Oates, Mrs. Mason Lawson, Mrs. T. D. Brown, Mrs. Louis Hundley, Mrs. Howard Stern and Mrs. Charles Henry led the discussions which were de-

signed to cover specific questions brought up by the county officers regarding auxiliary work and its procedures.

The Woman's Auxiliary to the Pope-Yell County Medical Society met Thursday evening, October 9, with Mrs. A. W. Rye as hostess. The meeting was called to order by our President, Mrs. Brooks Teeter. A report was given on final plans to start our Nurse Recruitment Program. Mrs. Ellis Gardner was appointed chairman of this committee. Mrs. Ernest King submitted a list of civic organizations to be sent to the State Chairman of the Erle Chambers Memorial Fund. Mrs. W. O. Young, Jr., gave an interesting talk on the recent meeting of the District Councilwomen.

Mrs. Max J. Mobley.

BOOK REVIEW

Pharmacology in Clinical Practice: By Harry Beckman, M.D., Director, Departments of Pharmacology, Marquette University Schools of Medicine and Dentistry; and Consulting Physician, Milwaukee County General Hospital and Columbia Hospital, Milwaukee, Wisconsin. 839 pages with 152 figures. Philadelphia and London: W. B. Saunders Company, 1952. Price \$12.50.

This treatise is a timely addition to the texts that are available in the field of pharmacology. The organization of the subject-matter and fresh approach to the material covered reflect the work of a great teacher and investigator. The fifty-six chapters are logically grouped into nine sections and four parts. Part one deals with general principles and the background of pharmacology. Part two deals with drug action on physiological mechanisms. Part three deals with the application of drugs to clinical medicine and part four is concerned with toxicology. There is a tendency throughout the book to discuss the general actions of drugs having similar effects without giving specific details of individual drugs. Two unique features of the text appear at the end of each chapter. There is a summary of the chapter and a discussion of unsolved problems which is very stimulating. The practitioner will find the text an up-to-date reference for the drugs he is using.

Basic Principles of Cancer Practice: By Anderson Nettleship, M.D., Professor of Pathology, University of Arkansas School of Medicine and Pathologist in Chief University Hospital, Little Rock. The Williams & Wilkins Company, Baltimore, 1952, pp. 398.

Obviously written for the teaching of undergraduates, this small volume is one that the general practitioner will find up-to-date and illuminating. Its readability makes it delightful to pick up for a few minutes reference and hard to put down. The short, almost cryptic sentences give a clear picture of the discussion.

Stress is made on the procedure in cancer patients. The authors summarizes clinically useful knowledge and points the way to action in both doubtful and in the proven case of cancer. It is a stimulating volume.

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..... The JOURNAL

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VENOUS DISEASE OF THE EXTREMITIES*

GENE B. STARKLOFF, M. D.
Saint Louis

The evolution of a rational approach to the treatment of peripheral venous disease has been weighed with unusual difficulties. We have been plagued with dogmatism and arm chair philosophy that has not been based upon objective experimental and clinical data. Because of this it seems worth-while to review advances in the management of the troublesome disorders resulting from disease of the veins of the lower extremities. The problem is a common one, and mismanagement of the condition is frequent.

Among examples of incorrect concepts that exist is the rather widespread idea that deep veins which have been the site of thrombophlebitis remain permanently occluded and that varicose veins secondary to thrombophlebitis of the deep venous system represent important collateral channels that must be preserved.

It is important to review briefly a diagrammatic representation of the circulation in the normal state, figure one. Valves are present below the point of entrance of large tributaries. The direction of blood flow is to the heart in the deep and superficial venous systems and from the superficial to the deep in the communicating veins. Reflux is prevented by normal valvular competence.

In those cases in which there is an hereditary weakness of the vein walls or the valves of the saphenous system, the result is diagrammatically shown in figure two. Here the direction of flow is in a retrograde manner and the stage is set by the resulting venous stasis for the development of an ulcer complex. Clinically this can be demonstrated by the Trendelenberg test.

The third possibility that exists is retrograde flow occurring in the deep venous system through a vein that has been recanalized after deep ve-

nous thrombosis. This is illustrated by figure three, which shows the forcing of the communicating valves and the development of secondary varices. Again ulcer complex can and usually does develop.

Clinical proof of the situation that has been outlined above can be demonstrated by the technique of retrograde venography as developed by Bauer of Sweden and ourselves in this country. Once there is a chronic leg ulcer, certain pathologic features are irreversible and can be corrected only by surgical intervention. To Girdwood of South Africa should go the credit for clarification of the role of the three vital factors in the production and chronicity of leg ulcers; the vein, the pump and the ulcer. Correcting any one factor will not result in satisfactory healing. Thus I feel that wide excision of the ulcerated area and the surrounding area of induration followed by immediate split thickness skin grafting is the procedure of choice in most leg ulcers. By this method scar, skin stricture and the ulcer are removed. The veins are ligated in a subfascial manner as advocated by Linton, and the pump can be reconstituted by correcting shortening of the Achilles tendon, if this exists. Thus not only the ulcer problem but to some extent the vein problem is overcome. The resulting freedom from pain and mobilization of the ankle plus lengthening of the tendon, if indicated, adequately restores the pump. I feel that this is a problem inherent to all venous leg ulcers regardless of the initiating cause and is a definite advance in our armamentarium in caring for these difficult problems.

While attention to the features already mentioned is of extreme importance, local correction of the vein problem at the site of ulceration is not sufficient. In the post phlebotic extremity after confirmation of the incompetence of the deep venous system by retrograde venography, I believe that popliteal ligation should be carried out. I have done this procedure on 70 patients, both in my private practice and on the surgical service of the St. Louis City Hospital. There

*The Department of Surgery, St. Louis University School of Medicine and the Surgical Service, St. Louis City Hospital.

*Read before the Seventy-sixth Annual Session, Arkansas Medical Society, Little Rock, April 21, 1952.

have been no complications and no deaths. The time elapsed is too short to allow final evaluation; the immediate results are excellent. Superficial femoral vein ligation has been abandoned in favor of the easier and more direct attack at the popliteal.

Frequently the post phlebitic extremity is the site of secondarily incompetent varicose veins that contribute to the orthostatic venous overload and stasis. These should be treated by high saphenous ligation stripping and the excision of venous lakes just as in the case of primary varicosities.

Lumbar sympathectomy has been advocated by some in the treatment of the post phlebitic state. The rationale is that vascular spasm accompanies the late post phlebitic state. While the employment of sympatholysis in acute thrombophlebitis seems rational and clinically is attended by striking relief. In my hands it has proved valueless in the treatment of the post phlebitic extremity. I have reserved its use for those patients in whom the goal is locally increased blood flow to the extremity as an aid in the "take" of split grafts after ulcer excision. Such individuals have been mainly in older age groups with clinical evidence of decreased arterial supply.

Saphenous neurectomy as described by Atlas of Cleveland has occasionally been of value in the treatment of painful superficial ulcers occurring in the post phlebitic state. The pain in these ulcers is causalgic in type, precipitated by exposure to air, emotional stress, and so severe as to preclude even local medication. The ulcers are quite superficial and can be expected to heal without grafting if the venous disorder is corrected. However, because of the exquisite pain even elastic bandages cannot be tolerated. Section of the saphenous nerve in the femoral region in properly selected cases results in immediate freedom from pain in the ulcer and vigorous medication of the ulcer can be carried out. Grafting can thus often be avoided. In my experience these cases are infrequent but the procedure is of real benefit when they are encountered. The operation is done under local anesthesia and the saphenous nerve is sectioned as it traverses the wall of the femoral sheath. We have performed the operation six times, with relief from pain and healing of the ulcer after local treatment in all cases.

The post phlebitic extremity thus is one in which the thrombotic episode has resulted in clot-

ting of the deep venous system most frequently ilio femoral. The thrombosis is followed by recanalization and valvular destruction, this in turn producing orthostatic venous overload and stasis. These conditions result in fibrosis, lymphatic obstruction, secondary varices, ulcer complex, and usually some degree of loss of pumping action. Due to the multiple facets of this disturbance in physiology, multiple types of therapy must be judiciously chosen. Individualization should be rigidly adhered to and no one method of treatment yields one hundred percent satisfactory results. Instead of the defeatist attitude so often present in the past, these patients can often be benefited by care of secondary varices, placing a valve where it is urgently needed by ligation of the popliteal, and with the stage thus set for healing excision of the ulcer subfascial ligation of the communicating veins, reconstruction of the muscle pump and skin grafting. Occasionally we add lumbar sympathectomy and saphenous neurectomy where special indications exist. By utilization of any and/or all of these procedures I have been encouraged by the immediate results and feel that no patient has ever been made worse by operation.

Treatment of Primary Varices

The treatment of primary saphenous varicosities has improved largely as a result of the appreciation of two factors: The necessity for surgical obliteration of the varicose venous channels, and the understanding of the role of the vein ulcer pump mechanism previously pointed out. Painstaking high saphenous ligation with careful attention to tributaries in the region of the saphenous bulb is a "sine qua non" of therapy. I prefer a vertical incision from the crease of the groin downward. It affords better exposure, makes for easier handling of the vein stripper and transects fewer lymphatics.

It should be remembered that the main saphenous vein is responsible for the signs and symptoms in the varicosed lower extremity. This is due to incompetent valves causing reversal of flow. Communicating veins may also have incompetent valves. Consequently it may be expected that high saphenous ligation alone cannot be expected to produce satisfactory or lasting results. Extirpation of as much of the saphenous system as possible is desirable; this has been most satisfactorily accomplished in my hands by use of the intraluminal stripper. In many cases such stripping will not completely accomplish the de-

sired result. If venous lakes fed by incompetent communicating veins exist, excision of the venous lakes with subfascial ligation of perforators is the procedure of choice. It is of practical importance to mention that prominent veins and venous lake should be mapped out preoperatively with a solution of 2% brilliant green. At the completion of the operative procedure snug elastic bandages from toe to groin are helpful in minimizing hematoma formation resulting from the stripping procedure. Ambulation as soon as possible after recovery from anesthesia is indicated. Multiple ligation without excision has been recommended, but does not appear to be as sound as actual extirpation of the diseased veins.

Sclerosing Agents

In regard to the retrograde injection of sclerosing solutions, I feel that this is to be condemned for two reasons. 1) The sclerosing solutions can and frequently does precipitate acute phlebitis with its danger of pulmonary embolization. 2) The known proclivity of sclerosed veins to recanalize thus recreating the situation, possibly in an augmented form. I reserve the use of sclerosing agents for the remote postoperative period to eradicate venous channels missed after high ligation, stripping and excision of lakes.

Fortunately a large number of patients with varicose veins present themselves for therapy before ulceration has developed. The surgical care of the primary varices becomes the method of treatment that prevents stasis ulcer. In cases in which ulceration exists, and they are frequent, it will be found that the ulcer is usually of such long duration that induration, lymphatic fibrosis, pigmentation and dermatitis exist. In such cases the principles previously outlined of excision of the ulcer subfascial ligation of perforator veins and the application of split grafting are of paramount importance. If Achilles tendon shortening has occurred, lengthening procedure should be done. I have not hesitated to resort to circumferential excision and grafting. Although it might be expected that edema below the site of circumferential excision would be augmented, this has not been the case.

In actual practice, a thick split graft is taken from the opposite thigh with a Blair-Brown knife or a dermatome and then attention is directed to the ulcer. Excision of the ulcer down to and occasionally including the underlying fascia is carried out, and the graft is anchored in place with pressure dressing without suturing; absolute hemostasis of the ulcer bed is most important, for

the few grafts that I have lost have resulted from the hemorrhage beneath the graft. Absolute bed rest is enforced for three weeks, dependency of the grafted areas is not permitted for six weeks, and no weight bearing for three months. There are of course ulcers of such short duration that healing will occur after correction of venous stasis, and an attempt at such a regime is justifiable. Too frequently the ulcers that heal recur and come to excision. I feel that it is seldom if ever advisable to attempt to stimulate granulation and place an onlay graft without excision of the ulcer. The cases in which I have attempted this have been found to have a fibrous woody base beneath a millimeter or two of clean granulations, a situation not conducive to the "take" of a split skin graft. Patients with varicose veins and stasis ulcers should have aggressive surgical therapy and not salves, pastes, ointments, and reassurance.

Acute Thrombophlebitis

Acute thrombophlebitis merits our careful consideration for two reasons: First it is a great potential killer through the medium of liberation of thrombus and the subsequent production of pulmonary embolus. Secondly it is pre-existing thrombophlebitis that results in the post phlebotic extremity already described. There have been many theories as to the cause of venous thrombosis and much has been done to devise tests that will predict those patients with a tendency to intravascular clotting. The role of prophylaxis is obviously the most important one. Out of the wealth of material accumulated, several facts seem to be important. First and possibly most significant is that there is no sure way to predict those individuals who will develop thrombosis. Recently Kay and Ochsner have developed a simple laboratory test which they believe will reveal a reduction in blood antithrombin to dangerously low levels. They state that these low levels reflect a pre-thrombotic tendency and call for immediate therapy. While this work has been interesting, it has been assessed on purely clinical grounds and in 20 clinically obvious cases of phlebothrombosis they were able to demonstrate a low blood antithrombotic cure in all but one case.

Their work does not seem to be valid if a correlation is made between the blood antithrombin levels of critically ill patients during life and the presence or absence of venous thrombosis at autopsy. McLachlin has carried out such determinations of antithrombin levels and correlated

them with autopsy findings. He has concluded that the ante mortem recognition of patients who will develop thrombi by existing laboratory methods is impossible. He has further shown that clinical recognition of thrombi is unpredictable and frequently not possible. This has been emphasized by Faxon who reported 128 cases of fatal pulmonary emboli in which only 5.5% had clinical evidence of thrombosis. This does not imply that careful attention to the patients venous system postoperatively is not important. The physician should familiarize himself with the early signs of thrombosis such as calf tenderness, pain on dorsi flexion of the foot, prominent pretibial veins, slight edema, color change on dependency and increased pulse rate. Careful observation of the postoperative patient may make a diagnosis of thrombophlebitis apparent and allow the institution of appropriate therapy.

Thirty-four thousand people die annually from pulmonary embolism and there is one death from pulmonary embolism following every one thousand operations, according to figures collected at the Massachusetts General Hospital. Twenty-five percent of the deaths occurring after gastric resection were caused by pulmonary embolism. These statistics serve to illustrate the importance of the problem. Prophylactic methods have not lowered the incidence of thrombosis and embolism. Significant contributions in the basic undertaking of this subject have been made by MacLachlin who based his report on anatomical dissection and histologic study of the existing thrombi. From this work certain facts emerge that serve to clarify our understanding of thrombosis and embolism. The most important of these is the knowledge that most emboli arise from the large veins of the femoral and iliac systems and they originate from thrombi occurring at valve cusps. This is in contradiction to the previously held theory that the palantar and deep calf veins were the chief offenders. MacLachlin's findings showed that in 21 of 34 cases of venous thrombosis superficial femoral vein ligation would not have prevented pulmonary embolization.

The patient who now has a nonfatal pulmonary embolism has a 1 in 5 or 20% chance of developing a subsequent fatal pulmonary embolism and has a 3 in 10 or 30% chance of developing a subsequent embolus either fatal or nonfatal.

Therefore if all fatal emboli preceded by clinically diagnosed nonfatal emboli could be prevented the total number of fatal emboli could be reduced one-third. I have been discouraged by

the results of the use of heparin and dicumoral in patients who have had a nonfatal pulmonary embolus. These agents are good prophylactically, however, once an embolus has occurred they do not prevent subsequent emboli. I am convinced that the sure way to prevent future emboli after one nonfatal embolus is by ligation of the vena cava. This operation is technically not difficult in the hands of a trained general surgeon. Late sequelae as edema and stasis ulcers occasionally arise but these have been a few in number and in my experience nearly always are on the basis of the persistence of the thrombus present in the deep veins.

The late results of vena cava ligation have been carefully studied by clinical and laboratory data by Ray and Burch and their findings confirm the impression that sequelae are infrequent. Caval ligation is carried out through an extra peritoneal muscle splitting approach, the incision extending from the tip of the 12th rib transversely toward the umbilicus and terminating at the outer edge of the rectus sheath. The vena cava is ligated with two, heavy silk sutures in continuity.

In summary it may be said that femoral vein ligation does not seem warranted, either prophylactically or to prevent the onward progression of existing thrombi. Caval ligation should be used in those individuals who have had one pulmonary embolus to prevent additional emboli from passing to the lungs. If thrombosis occurs without embolism anti coagulant drugs, bed rest, elevation of the extremity and lumbar sympathetic block should be carried out. It is felt that prophylaxis of thrombus formation is the keynote and it is hoped that effective prophylaxis will be developed in the near future.

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YOU AND CANCER

J. J. MONFORT, M. D.

Batesville

The above could well have been the title of the recent meeting of the American Cancer Society, held in the Park-Sheraton Hotel in New York City, October 19th through October 24th. The annual meeting was divided up into refresher courses for volunteer workers and an annual medical-scientific session.

If you have been a volunteer worker and realize the tremendous extent of work that is done, not only in the United States but throughout Arkansas alone, by the volunteer workers of the Arkansas Division of the American Society, then you would have really enjoyed the program for the workers. Sessions for their training and public education, leadership training, publicity, service, and such special information series as: "The Research Story" by W. U. Gardner, chairman of department of Anatomy, Yale University, and "Living with Cancer," "Psychological Impact of Major Surgery," by A. M. Southerland, attending physician and psychiatrist at Memorial Hospital, and other type of information series for lay people. Then you would have a good idea of how well these people are being trained for the wonderful work of control of cancer in the voluntary way.

For the doctor, the scientific session was entitled: "Radiation versus Cancer," a critical evaluation. It was divided into these sections—1. X-rays as diagnostic tools. 2. Fundamentals in radiation therapy. 3. Practical applications of irradiation in the treatment of a cancer patient. The men who gave these panel sessions included men from the west coast to the east coast, from Canada to South America, from such information centers as Stockholm, Sweden; (the Radium Hemmet); the Curie institute in Paris, from the Radium Center in Copenhagen, from the Middlesex Hospital of London, and many other places. About 1,100 or 1,200 doctors were present at these sessions and the sessions were certainly up to date and quite informative.

One of the most interesting of the sessions appeared on the last day, when there was a combined meeting of the doctors and laymen with a presentation of the recent advances and present trends in treatment of cancer and research. George T. Pack, attending surgeon, Memorial Hospital, gave the "Present Trends in Cancer Treatment and Research in Surgery" and Jens Neilson, Director of the Radium Center in Copenhagen, gave the same information as regards ra-

diation. Also given at that combined session was a paper on application of recent research to chemotherapy of disseminated cancer in man by Sidney Farber, chairman division of research, Children's Cancer Research Foundation, Boston. Another paper was "Non-surgical Advances in Treatment of Cancer" by C. P. Rhoads, director of the Memorial center for Cancer, Sloan-Kettering Institute, a Division of Cornell University Medical College.

This meeting was certainly a high point in the voluntary method of controlling a disease by public education, by research and by service. I had the pleasure of talking to Dr. Kottmeier of Stockholm, Sweden, and find that though their National Health Insurance Plan is not compulsory as we seem to think it is in the United States, that it is quite extensive. I found out that it provides for no research.

Dr. Kottmeier told me that he has been in England, Germany and several other countries in the last three years several times and that those people that have a nationalized system of medicine, have no research going on and that their medical care is deteriorating. He has been very grateful to the American Cancer Society and could not understand why hundreds of more doctors were not present than the 1,200 or 1,400 that registered for this scientific meeting.

In other words, doctors, this means if combating this particular condition is voluntary, then it seems to us that we do not appreciate it to the extent that we should. It is our sincere hope that you will get behind the American Cancer Society program to the fullest extent during the coming year, for it is certainly worth-while.



THE RELATIONSHIP OF TRAUMA TO PEPTIC ULCER

ALFRED KAHN, JR., M. D.*
Little Rock

The question of whether or not trauma can cause perforation of a peptic ulcer has become important because of the Workmen's Compensation Laws. Medical and judicial opinion are not always in agreement in their interpretation of the causation or aggravation of disease; for example, claimants have been permitted to recover in cases of sarcoma where it was alleged that injury initiated the neoplastic processes.

Textbooks do not ordinarily discuss at any length the relationship of trauma and peptic ulcer. Cecil, for example, states "direct epigastric trauma is occasionally followed by the prompt appearance of symptoms of ulcer, and indeed by its subsequent roentgenologic demonstration, but there is no other evidence that it plays any role in the pathogenesis in the vast majority of cases.(1)

In Pathology of Trauma, Moritz discusses at some length the relationship of trauma to acute ulcer.(2) He states that acute ulceration may occur following direct external trauma, and it tends to be linear and at right angles to the lesser curvature; bursting lesions are linear and tend to follow the lesser curvature. Mechanically produced ulcers differ in several respects from spontaneous acute ulcer; 1. Submucosal hemorrhages frequently occur with mechanical trauma. 2. Traumatic ulcer often has undermined edges. 3. Spontaneous ulcers tend to be oval. The relationship of trauma to chronic peptic ulcer has been definitely reported by some authors; Dr. Moritz believes that this is always associated with some predisposing factor. If four factors are fulfilled, this author states that he would accept the relationship of trauma to chronic ulcer: 1. No pre-existing ulcer. 2. Violence applied over stomach and duodenum. 3. Continuity of signs and symptoms from the injury. 4. Positive evidence that the ulcer exists.

Stern has reviewed this subject.(3) He points out that traumatic rupture of the stomach has reported without any external trace of violence appearing on the abdominal wall; the early symptoms may not appear serious.

Brahdy and Kahn concur with the findings of the above authors.(4) They also cite the possibility of aggravating an old ulcer with a stomach tube or the leaded glove of a radiographer.

In a ten-year period, the Arkansas Workmen's Compensation Commission has held hearings on twelve cases in which the principal point involved was, could trauma produce a perforation or serious bleeding from a peptic ulcer. In one-third of the cases, the claimant was awarded compensation.

Analysis of Cases:

Claim No.	Activity at Time of Onset of Symptoms	Pre-existing Sympt.	Compensation Awd.	Comment
727355	Carrying concrete form, and companion stumbled, forcing patient to carry all the load	Yes	No	Perforation
309045	Stacking wood	Yes	Yes	Patient bled, did not perforate.
616834	Digging a footing	Yes	No	Perforation
419119	Lifting 200-pound box	Yes	No	"
718311	Fell 20 feet.....	Yes	No	"
733333	Lifting heavy rock.....	Yes	Yes	"
919354	Loading coal	Yes	No	"
106890	Fell from truck.....	Yes	No	"
110944	Moving heavy log	No	Yes	"
121895	Moving sand in wheelbarrow	Yes	No	"
241933	Jarred by Truck falling 5 feet	Yes	No	"
413709	Striking tree with an axe	Yes	Yes	"

Legal Aspect in Arkansas

The Arkansas Workmen's Compensation Commission is granted the authority in Arkansas to hear and settle claims of workmen who contend that they were legally injured while at work. Since it was established in 1940, approximately 11,000 cases have been heard. Of these, twelve cases involved perforation of peptic ulcers. Provided the claimant can prove that the traumatic episode occurred while at work, the commission will grant compensation in certain cases of direct trauma and in certain cases of straining. This point of view is well expressed in an excerpt of Claim No. 733,333 of A. H. Taylor, claimant, versus North Arkansas Electric Cooperative Corporation.

The conclusions of this case are read verbatim from the report. "The evidence in this case disclosing that the claimant exerted himself in attempting to lift a rock weighing about 75 pounds, which he stated was frozen to the ground with ice. He immediately felt a pain in his abdomen and gradually became worse until he was op-

*Dept. of Med., Univ. of Ark. Sch. of Med.

erated on that night. The attending physician stated that the claimant had a ruptured peptic ulcer and it was his opinion that the strain from lifting aggravated the rupture which necessitated immediate surgery. Two physicians who examined the claimant subsequent to the hearing were of the impression that the work the claimant was performing was not responsible for the perforation. Dr. Hollenberg states that it would very likely have occurred on the date that it did happen, regardless of what he was doing.

"In the case of Herron Lumber Company vs. Neal, 2005 Arkansas, No. 1093, a case originally heard determined by the Commission, the court had before it for consideration the question involving practically the same set of facts as in this matter, wherein the decedent incurred a strain while handling a log with a kank hook. He immediately had pains in the region of his stomach, which continued until he was operated on the next day. He had suffered a ruptured gastric ulcer and peritonitis, which had developed and caused his death. In the Neal case and in the incident matter, there was a strain, immediate pain, and a ruptured ulcer. The court said that in all cases of this kind, it was difficult to show with certainty the exact cause, but that they did not believe that it is required by the law that the claimant should be compelled to prove the alleged cause to a mathematical certainty."

It further appears that the court had before it medical testimony of a conflicting nature just as is present in the incident case. The court said that the sufficiency of evidence as to the quantum of proof necessary to sustain an award in a case of this kind is thus expressed in 71 C. J., page 1087. "In determining the sufficiency of evidence, doubt should be resolved in favor of claimant and the evidence should be reasonably and liberally construed in his favor." In the incident case, the facts definitely establish that the claimant immediately felt pain in the abdomen at the time he was attempting to lift the rock, and, although it is possible that the ulcer could have perforated at any time, as stated in physician's report, it seems that it was more than coincidental that it occurred at the exact time he exerted himself while working. Just how much he exerted himself, thus producing a strain, is conjectural. Since the rock was frozen to the ground with ice, as the testimony shows, it would be impossible to state how much exertion was made. It also appears from the weather report, etc., that the strain exerted was sufficient to cause a pre-exist-

ing condition to manifest itself whereby causing a disability within the meaning of the act; and, that the disability extended from the date of the injury, January 4, 1948. In short, the Commission allowed the claim.

In effect, it is held by the Commission that it is more than coincidence if the onset of pain occurs simultaneously with straining or trauma.

Discussion:

It is evident from the literature that direct trauma to the abdomen has been implicated as a cause of perforation of a pre-existing peptic ulcer and this seems self-evident. Cases in which there is no direct trauma to the abdomen are also reported. DeBakey (5) collected the following reports from the Literature: "Of these factors, trauma has been considered as one of the most obvious. Such trauma may be either internal or external. Externally applied trauma is also of interest from the standpoint of the Workmen's Compensation. Numerous authors have directed attention to the fact that such trauma can be an immediate causative factor in the development of perforation. Weir in 1900 directed attention to cases of perforated ulcer which followed externally applied trauma, and Murphy and Neff, in 1902, referred to a case observed by a French surgeon, in which the perforated duodenal ulcer resulted apparently from the patient's lifting a heavy log. Peck, in 1907, reported a case which was believed to be due to lifting a heavy tank of gasoline. Moynihan in 1910, reported a case of perforation which apparently occurred following a fall of a heavy barrel across the patient's abdomen. Since then, a number of cases have been reported, either the result of a strenuous physical exertion, coughing, sneezing, or a violent blow to the abdomen. Powers, in 1925, reported five cases of duodenal ulcer which perforated following violent blows to the abdomen, and Morrow, in 1935, reported five similar cases. Physical effort as a traumatic factor has also been reported by numerous observers. However, the incidence of trauma as an exciting factor in perforations is not high; as a matter of fact, according to reported statistics, it occurs relatively rarely. In the fifty-one cases reviewed by Weir, there were only four in which trauma was considered as an immediate causative factor. Siroltine found the incidence to be approximately 20% in fifty-one cases. Meeker found it to be 11% in twenty-seven cases; Meyer and Brams, 3.2% in sixty-two cases; Gerhardt, 9% in one hundred and five cases;



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Mrs. Horton is the mother of two sons and one daughter. One of her sons is sales manager for a local lumber concern, the other having returned recently from a two-year term in the Army, is now enrolled in Junior College. Her daughter is a graduate of the University of Michigan and now resides in Ft. Wayne, Indiana. She is active in Church affairs and is a member of the Eastern Star.

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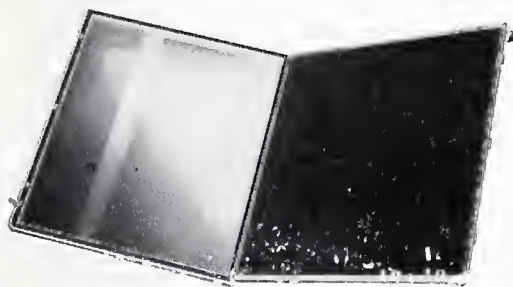
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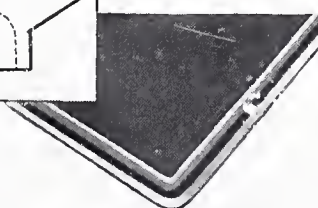
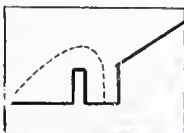
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Beams, 10.5% in seventy-six cases; Fallis, 2% in one hundred cases; Shawan, 2% of 389 cases; and Herzberg, 1.9% in 162 cases. In a collected series of 1,250 cases there were 50 (4%) in which perforation was believed to be due to trauma. From these statistical observations, it would appear that externally applied trauma plays a relatively insignificant role in the causation of the perforation. Corlette studied this problem on the basis of laws of physics and showed that according to Boyle's law, no increase of general intra-abdominal pressure can cause a strain in an ulcer and that perforation from such a cause cannot occur. However, contraction of the muscular walls of the stomach will increase the hydrostatic pressure within the organ without increasing the general intra-abdominal pressure and, if the difference in pressure passes the bursting strain of an ulcer, perforation will occur. Of further interest in this regard are the experimental observations made by Beame, who found that physical exertion did not increase the motility of the stomach, and in some cases actually caused diminution in the tone and activity of this organ."

The possibility of straining causing perforation has been refuted by Corlette. (6) He arrived at this conclusion after a mathematical study of the intra and extra-gastric pressures. He stated that no increase of general abdominal pressure can cause a strain in an ulcer, and, therefore, perforation cannot occur from that cause. He did state, however, that an increased pressure in the stomach without a corresponding general increase in intra-abdominal pressure might cause a rupture of an ulcer.

Burden, in writing on acute perforations, has emphasized how wrong the popular conception of perforation of a peptic ulcer is. (7) It is not, as thought by some, a blow-out. Rather, it is a gradual erosive process which finally destroys the barrier between the stomach and the peritoneal cavity.

One hundred and eighty-nine cases of perforated peptic ulcer were reported from the Royal Victoria Infirmary by Strang. (8) Sixty of these patients were at work at the time of perforation; one hundred and twenty-seven cases were definitely known not to have been working at the time of perforation. Twelve of the patients were known to have been straining at work at the time of the onset of their symptoms. Of this entire series, 71% had had previous symptoms.

The hesitancy of medical authority to arrive at a definite stand on the relationship of straining to

perforation of peptic ulcers, has forced the judicial branch of the government to make their own decision on this important point. It would be of great medico-legal importance if this question could be authoritatively answered.

CONCLUSIONS

1. The relationship of trauma to perforation of peptic ulcer has been discussed.
2. Eleven cases have been heard before the Arkansas Workmen's Compensation Commission, and the Commission's decision on this relationship has been examined.

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SPARKS FROM THE SECRETARY

October 17 to 24. By American to New York City via Washington. Allergic reaction to fish on arrival in Washington caused us to madly scream for Statler Hotel doctor with good relief from Adrenalin in a few minutes. Never again will I fail to sympathize with an allergic patient! Spent 19th through 23rd at American Cancer Society. Listened profitably to outstanding radio therapists from Columbia to Stanford and from Sweden, Norway, Paris, London and Denmark. Also heard a couple of fellows named "Pack," and "Meigs." Outstanding experience in seeing "Cinerama," which will revolutionize movie industry. Visited New York Academy, PolyClinic Hospital, and Army medical friends. Saw several good shows including the incomparable Sophy Tucker.

October 26. Council meeting in Little Rock in which it seemed odd to see Brooksher in the "hoi polloi" instead of at the top of the table. Net result of meeting—Budget trouble!

Wednesday, Nov. 5, 1952. Last night Eisenhower's victory was celebrated here by Wyatt, R. Calaway and myself traveling to the beautiful Izard Memorial Hospital at Melbourne and getting Karr Shannon, Jr's second, red-haired son, into the world. All after midnight.

Slept a good part of the day and traveled to Jonesboro to the Craighead-Poinsett County Medical Society where Redheffer of Blue Cross and yours truly spouted extemporaneously. Enjoyed meeting old friends, Modelevsky Hoopers and bone setter John Gray.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

THE PROBLEM OF THE SO-CALLED "GOOD CHRONIC" CASE OF PULMONARY TUBERCULOSIS

By the Committee on Therapy, American Trudeau Society, The American Review of Tuberculosis, May, 1952.

DEFINITION. An exact definition of the term "Good Chronic" is difficult. While no chronic tuberculosis is good, the term is retained because past usage has given it meaning which is difficult to encompass in any other succinct term. The term carries the following implications: (1) Extensive tuberculosis of many years standing is present. This is usually bilaterally distributed. (2) Disease is reasonably well stabilized. Evidences of instability are usually rather minor and transient. (3) Chronic cavitation is commonly present and is often bilateral. Pathologically, the remaining tissue changes are deemed to be predominantly fibrotic with necrotic foci limited in size, generally well circumscribed, and not in the stage of rapid liquefaction. Emphysema is common. (4) Cough and expectoration are variable but common symptoms. The condition of the patient is usually reasonably good. Systemic symptoms are absent or, at most, are occasional. Limited respiratory reserve is the rule but not marked dyspnea. (5) Tubercle bacilli are present in the sputum or gastric specimens either constantly or intermittently. (6) Patients who may be included in the "Good Chronic" category vary considerably in their amenability to treatment, in the amount and kind of therapy already received, and in the prognosis. In many hospitals and clinics the term carries the implication that the patient is not readily amenable to cure, at least bacteriologically by the procedures in use, and that prolonged bed rest and other appropriate therapy have already been tried and have failed to achieve the goal of "inactive" tuberculosis.

THE PROBLEM. The problem is world-wide and well known. Some of the salient aspects are: (1) The patient may be reluctant to accept hospitalization and treatment. Such a patient may feel well and be quite unconcerned by the "cigarette cough" or "chronic bronchitis" which he has had for years. (2) For most patients and their families, a prolonged incapacitating illness becomes increasingly burdensome. Discouragement, bore-

dom, and resentment are common reactions. Such patients often leave sanatoriums and hospitals against medical advice; others remain and exert a disturbing and discouraging influence upon other patients. (3) A hospital bed may be occupied for years by one "Good Chronic" patient. Hospital facilities are absorbed which could serve for the successful treatment and cure of several patients with less refractory types of tuberculosis. Thus, patients with extensive chronic tuberculosis, constitute a major obstacle to efficient utilization of tuberculosis hospital facilities. (4) Patients in this category entail a considerable financial burden upon the community. (5) On the other hand, failure to hospitalize these patients, or discharging them back home and into the community creates other problems, for example: (a) the patients are generally infectious and may transmit tuberculosis to others; (b) many remain well clinically only under very sheltered conditions; (c) as a result, working capacity and ability to obtain satisfactory employment are extremely limited.

THE SOLUTION. No really satisfactory solution to the over-all problem has been devised. The best attack lies in prophylaxis, in finding tuberculosis early before it has become extensive and chronic and in hospitalizing promptly and treating adequately all patients with active disease. Present experience clearly demonstrates, however, that such prophylaxis is still far from eliminating the problem of the "Good Chronic" case in the immediately foreseeable future.

No single plan of attack is equally applicable to all patients or to all situations. Individualization is necessary in the management of all tuberculosis patients including "Good Chronics." This belief in individualization implicit throughout the following generalizations:

A. Home Care: Whether patients with "Good Chronic" tuberculosis should be kept in the tuberculosis hospital or handled at home must be decided individually for each case. Elements which deserve to influence this decision are: (1) Medical

and surgical considerations affecting the particular patient at hand; (2) The economic circumstances, the intelligence, and the attitudes of the patient and his family; (3) Circumstances in the community.

B. Special institutions: The advantages of special institutions and sheltered communities, as compared with the regular tuberculosis hospital, are: (1) Less medical and nursing care need be provided; (2) It is feasible to allow the patients more privileges, thus making a prolonged stay more acceptable; (3) Graded amounts of productive work can be assigned making such a place, in part, self-supporting; (4) Beds in regular tuberculosis hospitals are freed for other patients.

There are several deficiencies and disadvantages to this approach; Few such places exist at present. Few patients are willing to accept transfer when this implies that reasonable hope for definitive cure has been abandoned. Few competent tuberculosis physicians are willing to confine their work solely to patients with extensive chronic disease. Removal of "Good Chronics" from competent medical supervision removes the most important factor which may lead to eventual cure and rehabilitation.

C. Care in a regular tuberculosis hospital: Continued hospitalization in a regular tuberculosis hospital or sanatorium appears to be the procedure of choice in the management of the great majority of "Good Chronics." This does not preclude the assignment of these patients to certain wards or sections of the hospital where medical and nursing care is less intensive than on other wards, where complete self-care is the rule, where special privileges can be granted, and where special activities in the field of occupational and diversional therapy and rehabilitation can be conducted. These wards should, however, be an integral part of the regular hospital, with systematic supervision by the regular medical and nursing staffs. The reasons are: The prompt recognition and treatment of exacerbations of tuberculosis are important if further deterioration in the patient's status is to be avoided. These patients also need competent medical care of collateral diseases and of intercurrent illnesses. The patient who is not amenable to successful treatment today may become amenable tomorrow.

Modern treatment of any type of tuberculosis requires team work, to which the physician, the surgeon, the anaesthetist, various laboratory workers, and the rehabilitation team all make important

contributions. Such team work is seen at its best in the well-integrated tuberculosis hospital.

Conclusion. The principal objective in the management of patients with "Good Chronic" tuberculosis is the actual cure and rehabilitation of as large a proportion as possible. The proportion amenable to cure is growing steadily as new therapeutic attacks are developed, and there is good reason to hope that this proportion will grow still larger as progress in therapy continues. The full advantages of this trend are most likely to be realized in the regular tuberculosis sanatorium or hospital. While other alternatives frequently deserve consideration in individual instances, the best general policy is continued hospitalization of patients with "Good Chronic" tuberculosis in regular tuberculosis units, hospitals, or sanatoriums.

OBITUARY

SAMUEL N. ROBERTSON, age 74 years, of Sulphur Rock, died October 12th. A graduate of Barnes Medical College, Saint Louis, in 1907, he had practiced in Arkansas for many years. Survivors are his wife and a brother.

PROCEEDINGS OF SOCIETIES

Participants in the Miami meeting of the Southern Medical Association were: Fount Richardson, Fayetteville, Chairman, Section on General Practice, "The Doctor's Privileges and His Duties;" Isadore Meschan, Harold M. Landsman, Chalmers S. Pool and George G. Regnier, Little Rock, "The Roentgenographic Variations of the Normal Stomach and Duodenum;" Jerome S. Levy, Little Rock, discussion of a paper, "Clinical Aspects of Esophageal Hiatus Hernia;" William B. Reese, Little Rock, discussion of a paper, "The Hypnotherapy of a Patient With Severe Pruritus Vulvae;" B. P. Briggs and Eugene H. Crawley, Little Rock, "Adrenal Insufficiency With Report of Four Cases in New-born Males;" Ellis P. Cope, Little Rock, discussion of a paper, "The Present-Day Status of Infectious Eczematoid Dermatitis;" Willis E. Brown, Little Rock, "Vaginal Hysterectomy in the Management of Pelvic Relaxation," and Eva F. Dodge, Little Rock, "The Midwife: Should She Be Controlled, Ignored or Eliminated?" Officers are L. H. McDaniel, Tyronza, Councilor; Fount Richardson, Fayetteville, Chairman, Section on General Practice, and K. W. Cosgrove, Little Rock, Chairman-elect, Section on Ophthalmology and Otolaryngology.

The Sixth Councilor District Medical Society met in dinner session at DeQueen October 14th

for the following program: "Common Allergy Problems," Tom Johnson; "Endocrinology," Jim Wortham, and "Commissuratomy," Joe Buckman, all speakers of Little Rock.

The Independence County Medical Society met in regular session November 10, 1952, at Gray's Hospital. The meeting was presided over by Dr. Paul Gray, President.

The first item of business was a presentation of a need for a medical program at Arkansas College, by the president of the college, Dr. Paul McCain. He requests a Medical Committee from the county Medical Society set up a medical program which would meet the requirements of the North Central Association. This is a method to get the college accredited in North Central. He also suggests that perhaps the Medical Society might like to take into consideration a project of supporting the Science Department of the college. Dr. Gray, as President, appointed on this committee Dr. R. L. Calaway, chairman, Dr. W. J. Ketz and Dr. Paul Gray as members.

A film shown by the courtesy of the Arkansas Division of the American Cancer Society, Dr. J. J. Monfort, Chairman Board of Directors, was shown on "Cancer of the Uterus, Diagnostic Problems." A second film was also shown, "Cancer of the Breast, Diagnostic Problems," from the same source.

The Craighead-Poinsett County Medical Society was addressed November 5th at Jonesboro by J. J. Monfort, Batesville, and Mr. J. L. Redheffer, Little Rock.

J. H. McCurry, Secretary.

The Sebastian County Medical Society was addressed November 11th by W. R. Brooksher, "The Place of Cobalt Sixty in Modern Irradiation Procedure."

G. E. Simpson, Secretary.

PERSONALS AND NEWS ITEMS

John M. Hundley has moved to new offices at 412 Cross Street, Little Rock.

John L. Ruff, Magnolia, recently addressed students at Southern State College on "Marriage and the Family."

The week of October 26th-31st has been designated as "Dr. O. J. Kirksey Week" at Mulberry.

R. B. Robins, Camden, addressed the Medical Society of the County of Kings (New York) recently.

Erner Jones, Little Rock, has joined the staff of the Veterans Hospital.

J. Harry Hayes and R. A. McLochlin, Little Rock, attended the Medical Directors of Life Insurance Companies meeting in Los Angeles recently.

The following attended the Chicago sessions of the American Academy of Ophthalmology and Otolaryngology: Chas. S. Lane, E. C. Moulton and E. Z. Faier, Fort Smith; Raymond Cook and Dale Alford, Little Rock.

Newly-located in the state are Adron Bradley with Max Roy at Forrest City, and Ed Wheat with Friedman Sisco at Springdale.

Keith Hester, Gurdon, recently addressed the Prescott District Nurses Association on "Classification of Mental Disturbances."

W. E. Jennings, Rogers, and Jean Gladden, Harrison, conducted a diagnostic cancer clinic at Berryville recently under the sponsorship of the Carroll County Medical Society and the Arkansas Division, American Cancer Society.

Dr. and Mrs. Hoyt R. Allen, Little Rock, spent a recent vacation in New Orleans and Alabama.

Deer hunting in Colorado during October were J. M. Kolb, Clarksville, and H. W. Savery, Van Buren.

The following were registered at the Miami session of the Southern Medical Association: C. A. Archer, Jr., Conway; B. P. Briggs, Little Rock; O. H. Clopton, Rector; K. W. Cosgrove, Little Rock; M. C. Crandall, Wilmot; Eva F. Dodge, Little Rock; F. H. Jones, Piggott; R. M. Logue, Little Rock; H. M. Landsman, Little Rock; L. H. McDaniel, Tyronza; W. S. Orr, Jr., Little Rock; Fount Richardson, Fayetteville; R. E. Schirmer, Fort Smith; Euclid M. Smith, Hot Springs National Park, and H. T. Smith, McGehee.

Fount Richardson, Fayetteville, appeared as guest speaker on the Southern Medical Association's radio broadcasts at Miami in November.

The Arkansas Public Health Association was addressed at its meeting in Little Rock November 13th and 14th by E. J. Easley, "Our Own State Health Department;" Hayden C. Nicholson, "Development of the University of Arkansas Medical Center;" I. Meschan, "Practical Useful Applications of Atomic Energy," and Anderson Nettleship, "The Role of the Medical Examiner in Solving Crime."

Among those in attendance at the Dallas meeting of the Southwestern Surgical Congress were: Fred Krock, S. W. Hawkins, Fort Smith; Joe B. Wharton, Jr., El Dorado; Harvey Shipp; Harry Hayes, Little Rock; J. H. Hellums, Dumas; J. H. Wilson, Magnolia; Friedman Sisco, Springdale; Louis Good, Texarkana; M. C. Hawkins, Searcy; J. W. Jones, Texarkana; James Guthrie, Camden; Karlton Kemp, Texarkana; J. P. Price, Monticello, and E. J. Stroud, Jonesboro. Louis P. Good, Texarkana, was installed as president.

Dr. and Mrs. T. P. Foltz, Fort Smith, spent an October vacation in New York.

J. J. Monfort, Batesville, attended the annual session of the American Cancer Society in New York during October.

W. F. Adams, Fort Smith, attended the recent postgraduate course in obstetrics at the University of Kansas.

W. T. Holman, Jr., has been elected commander of the Van Buren Post, American Legion.

Fred J. Gray has moved to new offices at 405 Donaghey Building, Little Rock.

A. F. Hoge, Fort Smith, has been elected president of the Tulane University Alumni Association.

Dr. and Mrs. J. L. Pickens, Rogers, spent a recent vacation in Central America.

Fred H. Krock, A. S. Koenig, and W. R. Brooksher, Fort Smith, conducted a diagnostic cancer clinic at Siloam Springs November 13th under the joint sponsorship of the Benton County Medical

Society and the Arkansas Division, American Cancer Society.

L. D. Massey has been elected president of the Osceola Kiwanis Club.

H. L. Brown has moved from Malvern to England.

Drs. Lieblong and Banister have purchased a clinic building at Conway.

The Committee on Medical Motion Pictures has announced the publication of a new revised film list which includes 78 medical films not readily available from other sources.

This list will be available for distribution after December 1, 1952. A copy may be obtained by writing the Committee on Medical Motion Pictures, American Medical Association, 535 North Dearborn Street, Chicago 10.

THE NEW ORLEANS GRADUATE MEDICAL ASSEMBLY

The sixteenth annual meeting of the New Orleans Graduate Medical Assembly will be held March 2-5, headquarters at the Municipal Auditorium.

Eighteen outstanding guest speakers will participate and their presentations will be of interest to both specialists and general practitioners. In addition, the program will include a symposium on "The Value of Newer Drugs," daily demonstrations of medical and surgical procedures in color television, clinicopathologic conferences, medical motion pictures, over 100 technical exhibits and three round-table luncheons.

The Assembly has planned another interesting postclinical tour to follow the 1953 meeting in New Orleans. On Saturday, March 7, a party composed of doctors and their families will leave New York for Europe on the great new superliner, S. S. United States. The itinerary includes England, France, Switzerland and Italy, and arrangements have been made for medical programs in these countries. The tour ends in Rome and the group will return to New York on March 31 by Pan American World Airways, President Special.

Details of the New Orleans meeting and the postclinical tour are available at the office of the Assembly, Room 103, 1430 Tulane Avenue, New Orleans 12, Louisiana.

LILLY MARKETS NEW ANTIBIOTIC

A new wide-range antibiotic, "Ilotycin" (Erythromycin, Lilly), has been placed on the market by Eli Lilly and Company. Discovered and developed by Lilly research scientists, the new drug is the result of more than five years of intensive research in the antibiotic field. Over one hundred thousand mold organisms were isolated from soil samples and tested in Lilly laboratories before the one producing "Ilotycin" was found. Thousands of vials of common soil were sent to Lilly's Indianapolis laboratories from all over the world. One from the Philippine Islands provided the valuable erythromycin spore.

After laboratory testing, "Ilotycin" was released for clinical trial by clinical investigators in the antibiotic field. Their tests have indicated that the new antibiotic has certain desirable characteristics. Clinical evidence shows that "Ilotycin" is especially effective against gram-positive infections which have become resistant to other commonly used antibiotics. It is also very effective in those persons hypersensitive to penicillin or other antibiotics.

The broad activity of "Ilotycin" is evidenced in its effect against penicillin-susceptible organisms and in laboratory tests against certain large viruses and Rickettsia like those causing typhus and Rocky Mountain spotted fever. Although not completely studied clinically at this time, lab tests indicate activity against undulant fever also.

Clinicians report that "Ilotycin" is not active against gram-negative coliform bacteria, natural inhabitants of the intestinal tract which are destroyed by most other broad-spectrum antibiotics. Destruction of those organisms may be associated with diarrhea and may allow overgrowth of certain fungi, which in themselves may cause troublesome symptoms. Side reactions associated with the use of "Ilotycin" are almost nil. Out of several hundred patients receiving the drug, less than one per cent experienced nausea with the recommended dosage.

Structural analysis of the new antibiotic shows that its molecule contains no nitrobenzene group, sometimes thought to cause aplastic anemia. There has been no case of anemia reported in any of the clinical trials. When the serum concentration is maintained at a high level, the drug crosses the barrier into cerebro-spinal fluid.

"Ilotycin" is effective in oral administration and is being marketed by Lilly in the form of an ivory-

colored coated tablet packaged thirty-six to a vial.

AUXILIARY NEWS

The first meeting of the Sebastian County Medical Auxiliary was a luncheon meeting held October 13th. The plans for the new year were outlined and discussed by the fourteen members present. Various chairmen were named during the business meeting.

Officers for the year are: Mrs. J. D. Olson, President; Mrs. E. C. Moulton, Jr., Vice President; Mrs. Worth Gross, Secretary; and Mrs. Charles S. Lane, Jr., Treasurer.

Mrs. Louis O. Lambiotte, Publicity Chairman.

The Sebastian County Medical Auxiliary held a luncheon meeting Monday, November 3, 1952. Nineteen members were present.

Mr. Marvin H. Altman, Administrator of Sparks Hospital, was guest speaker. The theme of his talk was "The New Sparks Hospital" and a tour of the hospital was included. Hostesses for the luncheon were Mrs. L. A. Whittaker, Jr., and Mrs. Gordon Simpson.

The next meeting will be held in December but the January meeting will be omitted due to it falling immediately after the holidays.

Mrs. Louis O. Lambiotte, Publicity Chairman.

Mrs. Hoyt Choate, President of the Woman's Auxiliary to the Pulaski County Medical Society announced her chairmen for the 1952-53 regime at a session October 15 in the auditorium of the YWCA.

Miss Rhobia Taylor of the National Nurse Recruitment, who was a guest, gave a brief summary of the nursing situation using as her subject, "Demand Beyond the Supply."

Mrs. Gordon Oates, State Auxiliary President, gave a resume of the Auxiliary's program for the ensuing year. Mrs. John Hackett, member of the Arkansas Democratic Committee, gave a talk on "Going to the Polls." Members of the Senior Medical Dames were guests.

Mrs. W. G. Cooper, Publicity Secretary.

BOOK REVIEW

Correlative Neuroanatomy and Functional Neurology: By Joseph J. McDonald, M. S., M. Sc. D., M. D. Professor of Surgery, Columbia University Attending Surgeon, Presbyterian Hospital, New York, Director of the Surgical Service, Francis Delafield Hospital, New York; Joseph G. Chusid, A. B., M. D., Attending Neurologist, St. Vincent's Hospital, New York. 263 pages. Lange Medical Publishers, Los Altos, California. Price \$4.00.

This book has with this printing, the sixth edition, undergone a change in title, and co-author. It is also complemented by additional factual material from the "Functional Neurology" side.

From the initial edition to the present this volume has received a most favorable reception and active use by the medical student group. Among students the book has served as a most useful adjunct when the study of neuroanatomy was encountered. It is therefore proper for this edition to have been dedicated to the beginner in Neurology.

The material is presented in concise outline format. The book therefore serves as an exceedingly useful and correct reference volume and handbook for those practicing physicians, not primarily interested in one of the allied neurological specialties. The value of this informative book is enhanced by a complete detailed index.

This volume is recommended to the medical students, and also to physicians interested in undergoing a basic and rapid review of neurology.

The Origin of Life and the Evolution of Living Things: By Olan R. Hyndman, M. D., 648 pages with 42 figures and 2 charts. New York: Philosophical Library copyright; Hallmark-Hubner Press Printer, 1952. Price \$8.75.

This book is an extensive, even verbose, statement of the author's philosophic concept of how life began in its simplest form, and how species became as we know them today. It is hardly notable for the clarity and rationality with which the concept is developed. Many of the premises upon which the derivations of the hypotheses are based, would not bear scientific scrutiny. The author states, however, that he reserves "the privilege, before Him, of taking issue with any man's opinion and of formulating my own concerning where and how the Maker sets His hand."

Brain Surgeon: By William Sharpe, Director of Neurosurgery, Manhattan General Hospital, New York City. 266 pages. New York: The Viking Press, 1952. Price \$3.75.

"Brain Surgeon" is an autobiography from one of the pioneers in Neurological Surgery. The book is read easily and rapidly.

By William Sharpe, son of a Presbyterian minister, vividly portrays some of the outstanding events from his life. As a youth he was early motivated by a continual desire to study medicine, and as a student he had a drive for perfectionism which led him into a specialized field of medical study and practice. He clearly and frankly describes as one of his greatest interests his studies in reference to the etiology, diagnosis, treatment, and prevention of "cerebral palsy." If this book is widely read by the lay public, the medical profession may have to answer the following question: "Why are some of the patients with so-called cerebral palsy treated for the effects of a disease process without an attempt to accurately evaluate first the etiological agent or extent of brain involvement."

This author has had a dramatic and interesting career. He describes with lucidity some of the problems and tri-

umphs in his education, practice, and travel; that is, university life at Harvard and in Europe, surgical teaching and practice in China, the development of a restricted Neurological Surgery practice in New York City, and his travel throughout Russia presenting his results in treating cerebral palsy.

After leading the reader with rapid pace through the colorful events of his life, Dr. Sharpe reflects and states, "I am now in a position to say emphatically that moderation brings health and happiness, and that longevity depends more on the mind than on the muscles." This is a book for the interest of the public in general as well as all in medicine.

Frank Padberg, M. D.


The Principles and Methods of Physical Diagnosis—Correlation of Physical Signs With Physiologic and Pathologic Changes in Disease: By Simon S. Leopold, M. D., Associate Professor of Clinical Medicine, School of Medicine and Graduate School of Medicine, University of Pennsylvania; Director of Teaching of Physical Diagnosis, School of Medicine; Chief of the Thoracic Clinic, Hospital of the University of Pennsylvania. With a Chapter on **Sounds From the Thorax: Acoustic Principles:** by S. Reid Warren, Jr., Sc. D., in E. E., Professor of Electrical Engineering, the Moore School of Electrical Engineering, University of Pennsylvania. 430 pages with 390 illustrations with 19 color plates. Philadelphia and London: W. B. Saunders Company, 1952. Price \$7.50.

In our opinion this book offers no important advantage over previously available texts in its field. For the most part the material is presented in the traditionally dull manner which may account for the fact that many medical students ignore the valuable lessons of physical diagnosis and graduates rarely turn back to this course for review. Many venerable photographs invite the student's attention to medical oddities and challenge him, perhaps, to find a more gruesome case of his own. The chapter on acoustic principles is a commendable digression, but it achieves little correlation between the physics of sound and the complex artistry of physical diagnosis. The chapter on examination of the musculoskeletal system gives appropriate emphasis to a phase of diagnostic study which is often neglected. Teachers will agree with emphasis being placed on the medical history and will not object to introducing it at the last of the course when students are more advanced in the general curriculum. They may, however, anticipate a more complete and forceful treatment of this most important of all diagnostic instruments. In general, the book will probably be a disappointment to many teachers and practicing physicians who would welcome a revival of interest in this important field.

Benjamin B. Wells, M. D., Professor of Medicine,
University of Arkansas, School of Medicine,
Little Rock, Arkansas.

Correlative Cardiology: An integration of Cardiac Function and the Management of Cardiac Disease: By Carl F. Shaffer, M. D., F.A.C.P., Associate Professor of Clinical Medicine, Baylor University College of Medicine; and Don W. Chapman, M. D., F.A.C.P., Associate Professor of Medicine, Baylor University College of Medicine. 525 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1952. Price \$9.50.

This is a commendable attempt in the correlation of the factors which concern heart disease; anatomy, physiology, pathology, and gives condensed discussions of the various heart diseases which will be of help in daily practice.



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THE SYMPTOMATIC TREATMENT OF BRONCHIAL ASTHMA*

THOMAS G. JOHNSTON, M. D.
Little Rock

Bronchial asthma along with hay fever is the third most common chronic disease according to the Metropolitan Life Insurance Company.¹ Five thousand people in the United States are dying yearly from bronchial asthma.¹ Bronchial asthma of long standing may lead to pulmonary emphysema, pulmonary fibrosis, and cardiac failure. Emphasis is added to the importance of this allergic condition by the fact that 36,000 veterans of World War II are receiving compensations because of bronchial asthma.²

The etiology must be discovered, if possible, in order to prevent recurrences and complications. The majority of asthmatics can be greatly benefited by allergic study and treatment. It is unfair to advise the parents of an asthmatic child that he, or she will grow out of it. Twenty-five per cent of these children will not grow out of their asthma, and these are the ones who frequently become pulmonary cripples. Of the seventy-five per cent who do not grow out of their asthma many of them will develop allergic rhinitis, and frequently have recurrence of their asthma in adulthood. Just as one attempts to determine the cause of recurrent abdominal pain, one should attempt to determine the cause of recurrent attacks of bronchial asthma.

After determining the etiology, such as, tree, grass, and weed pollens, foods, or infection, one should treat patients with bronchial asthma from three aspects: (1) avoidance, (2) hyposensitization, and (3) symptomatic treatment.

By avoidance I mean: If the individual is allergic to a cat or dog, the animal should be removed, or if it is a food allergy such as wheat, then wheat should be eliminated from the diet. Hyposensitization injections are given only when avoidance can not be satisfactorily accomplished. As would be the case with the pollens of trees, grass and weeds, along with dusts and molds.

For symptomatic treatment one must try to ascertain the pathophysiology of each case. The chief factors in dyspnea in the asthmatic are: (1) mucosal edema, (2) accumulation of thick, sticky, gelatinous mucous in the bronchi and bronchioles, (3) pulmonary congestion, and (4) bronchial narrowing.

Sudden attacks of asthma are usually due to mucosal edema which is the outstanding factor in children and in uncomplicated adults. Epinephrine or adrenaline seems specific. Epinephrine is being used too infrequently. It is still the drug of choice in the treatment of bronchial asthma. Many times physicians are guilty of using too large doses, thus, the tremor, tachycardia, nervous reactions, headaches, and nausea and vomiting occur too frequently and severely. Infants and children pound per pound tolerate more adrenaline than adults. A suggested average dosage schedule for epinephrine is as follows: Up to 2 years of age, 2 mx of 1:1,000. 2 to 6 years of age, 3 mx. 6 to 12 years of age, 4 mx. 12 years on, 5 mx. Some adults, 6 to 7 mx.

It is much better to use small doses at frequent intervals than a large initial dose. Frequent injections of large doses of adrenaline may cause the asthma to be worse. Infants and small children are often benefited by adrenaline 1:1,00 by spray using 1 to 2 cc in a devilbiss nebulizer No. 40. Mist is sprayed in front of the nose and mouth.

To determine the most effective dose that causes the least side reactions one should use Eyermann's method. This consists of giving one mx of adrenaline per minute subcutaneously leaving the needle in place until the patient is relieved or begins to feel nervous and jittery. Eyermann's method is simple and practical.

Adrenaline or adrenaline-like drugs can be given subcutaneously, intramuscularly, by aerosol or sublingually. It has been given i.v. and if it is administered that way it should be given in a dilution of 1:1,000,000. The constant use of adrenaline 1:100 by spray seems contraindicated because it promotes dependance and often causes irritation of the bronchial mucous membrane. We do not use adrenaline-in-oil because it is neither

* Read before Seventy-sixth Annual Session, Arkansas Medical Society, Little Rock, April 22, 1952.

as prompt nor as dependable as the aqueous 1:1,000 solution. Also, one is unable to gauge the dosage or control a bad reaction.

Sublingual forms have not been very effective in my experience. Contrary to advertisements they produce a large number of side reactions.

Ephedrine, which is structurally similar to epinephrine, has the advantage over epinephrine of being effective when given by mouth and of having a longer duration of action. Ephedrine does not act as promptly, nor is it as effective as adrenaline. Nevertheless, because it can be taken orally and has a longer duration of action, it is especially indicated for the mild attacks.

Unfortunately, side reactions, such as nervousness, tremors, tachycardia, nausea and vomiting are fairly common. Consequently barbiturates are used to offset these side reactions. We prefer racephedrine compounds because racephedrine does not cause the large amount of central nervous system stimulation that regular ephedrine causes. Ephedrine is frequently combined with phenobarbital and aminophylline which makes a good combination for use in the asthmatic.

The U.S.P. dosage of $\frac{3}{8}$ gr. is usually too much. Frequently $\frac{1}{8}$ gr. or $\frac{1}{4}$ gr. will be sufficient. Children pound per pound tolerate ephedrine better than adults. $\frac{1}{2}$ to 1 teaspoonful of ephedrine containing $\frac{1}{8}$ grain per dram is of value in infants and children.

Aminophylline is a very useful drug, however, it is being overused. The uncomplicated asthmatic with a normal blood pressure as a general rule responds better to adrenaline. Aminophylline is especially useful in the elderly asthmatic, the patient with emphysema, the patient with hypertension, and the epinephrine-fast patient. Aminophylline may be taken orally, rectally, intramuscularly, or intravenously. It is most effective intravenously. However, at times rectal instillation will help when it fails i.v. Intramuscular administration is very painful and for that reason we do not use it.

Aminophylline is not very effective by mouth unless one uses large amounts. In using large amounts by mouth, nausea and vomiting frequently occur. At times 3 gr. 4 times daily of an enteric coated preparation will be of help to the elderly asthmatic.

The intravenous dosage is 0.25 to 0.5 grams contained in 10 or 20 cc, which should be given very slowly—not greater than 1 cc per minute. The reason for giving it slowly is to prevent circulatory collapse. Aminophylline supposedly dilates the coronaries, and stimulates the myocar-

dium. However, it is effective because it decreases both the venous pressure and pulmonary congestion. Rectal suppositories of aminophylline are often effective and work especially well at night. One should use a suppository with a low melting point base such as cocoa-butter, to assure maximum and quick absorption. A retention enema of 1 ounce of a 10% solution of aminophylline using a bulb syringe and a No. 17 French catheter acts promptly and effectively.

Iodides have been known for years to loosen the thick, tenacious sputum of the asthmatic. Potassium iodide is probably the most important drug that is frequently overlooked in treating the chronic asthmatic. Potassium iodide, is, in my experience, the most effective expectorant for people with bronchial asthma. It also has another action not yet understood which benefits the asthmatic. It has been suggested by some that it enhances the action of endogenous epinephrine. Frequently asthmatics will respond to the addition of iodides alone where previous medication without iodides failed. The usual dosage is 10 to 15 drops of a saturated solution in water after each meal. Another method is to give the potassium iodide beginning with 5 drops, increasing one drop per day after meals, until tolerance or 15 drops are taken. Sometimes to minimize side reactions we administer it for 3 days, stop for 3 days, then repeat. This does not seem to depress the therapeutic effect greatly.

Sodium iodide may be given intravenously in a dosage of 10 cc of a 10% sol. Surprisingly large doses have been given without ill effects.

The usual side reactions are an acniform eruption on the face, back, and chest; swelling of the salivary glands, and rhinorrhea. Rarely granulomatous lesions occur. These side reactions subside quickly after stopping the iodides.

Syrup of hydrodic acid is especially indicated in infants and children. Ephedrine sulfate in syrup of hydriodic acid makes an excellent anti-allergic cough remedy. It is also good for asthma.

Syrup of Ipecac in infants is of value in causing the infants to vomit. On vomiting they also eject mucous from the bronchial tree, because of reverse peristalsis in the bronchi.

The majority of the asthma patients who need hospitalization is observed in the summer months of July, August and September. We believe this is due to dehydration. At least 12 glasses of fluids must be taken daily.

The hot water treatment of Dr. Cazort's⁴ is often helpful in relieving the patient who is epinephrine-fast. The technique is to give 0.25 gr. of

aminophylline i.v. to offset the elevated pulmonary pressure caused by the adrenaline. Next one gives as many glasses of hot water as the patient is able to drink; at least one pint. As this may increase dyspnea temporarily one should administer a small amount of ephedrine to take care of any mucosal edema. The patient must be encouraged to cough. Frequently, he will cough up large plugs or casts of mucous and be much improved.

Almost every day we see an asthmatic who has been given all the antihistamines with very little or no benefit and yet has never been given adrenaline or ephedrine. The antihistamines appear to be contraindicated in the asthmatic because of their atropine-like action. The antihistaminics cause the mucous to become more dry and tenacious, and thus more difficult to be coughed up. Sometimes children will be benefited by these drugs because of mucosal edema alone. However, ephedrine or adrenaline is almost always the drug of choice even in children. I believe some severe asthmatics have been killed because of therapy with the antihistaminics.

Oxygen should be given only in cases of cyanosis and then only by mask or nasal catheter. I prefer the nasal catheter. The oxygen tent seems contraindicated for 2 reasons. First, some people have claustrophobia and have the feeling that if they are placed in a tent they are "at death's door." Second, oxygen takes away the stimulus to breathe if given in large quantities over long periods of time. A decompensated respiratory acidosis develops as the O_2 causes decrease in the depth and rate of respiration.

Sedation is a most important aspect of therapy in the asthmatic. However, morphine or any of its derivatives should never be given. Morphine because it depresses respiration, depresses the cough reflex, and causes bronchial narrowing permits accumulation of secretions. This has caused more deaths in asthmatics than any other factor. Demerol is also contraindicated because it is habit forming, and also depresses the cough reflex and causes bronchial narrowing. The safest sedatives are rectal ether-in-oil, chloral hydrate, paraldehyde and the barbiturates.

The dosage of rectal ether is 2 to 4 oz. of ethyl ether in equal parts of olive or mineral oil given as a retention enema over a period of 20 minutes to light anesthesia. Oftentimes this will stop an attack of asthma of long duration.

Paraldehyde should be given in 8 cc dosages by mouth or 15 cc by rectum every 4 hours as needed. Chloral hydrate should be given in 0.25 or 0.50

grams doses during the day with 1 gm. at night.

Penicillin, terramycin, and other antibiotics are needed only when there is secondary infection. Fever, purulent sputum, elevated white count and elevated sedimentation rate in combination are good indications for their use. At times penicillin or penicillin-streptomycin by Aerosol will be of benefit.

Frequently the "intrinsic" or infectious asthmatic has an accompanying sinus infection. Proper treatment of this infection will often relieve the asthma, and will help to prevent recurrences. Early recognition is essential.

ACTH and cortisone should be reserved for use only after the usual measures fail. In these cases the patients are nearly always of the "intrinsic" or infectious type with inflammation being the probable cause. These patients usually have a "cold" or respiratory infection which enters the chest causing a low grade broncho-pulmonary infection. ACTH and cortisone will often help them. I.V. ACTH is the most effective as well as the cheapest method of administration. One usually gives 20 mg. in 1,000 cc of 5% glucose in D/W at the rate of 35 drops per minute, so that the I.V. will last at least 8 hours. This is given daily until maximum benefit and then the dosage is decreased 5 mg. daily, with the total course lasting from 5 to 7 days or less.

ACTH in a gelatinous form may be given once or twice daily intramuscularly instead of every 6 hours as is recommended for the regular or fluid ACTH. I generally give 1 cc which contains 40 u. 2 times daily until maximum relief, then taper off slowly over a period of approximately 10 days to 2 weeks.

Cortisone acts more quickly by mouth than by intramuscular injection. It should be given every six hours with a slight increase over the parenteral dose. ACTH has been more effective than cortisone in my experience.

ACTH and cortisone are powerful hormones and have been known to cause serious side reactions, even death.⁵ Perforations in the gastrointestinal tract are not uncommon complications. These drugs are not a panacea for asthma. They have never cured a case and they never will. They should be used only when the usual measures fail. They are not a substitute for good allergic management, and at this time should be reserved as a last resort measures. They do not act quickly enough for the acute asthmatic attack.

An individual who has severe, intractable asthma for over 24 hours, and who is not relieved by

the usual methods should be hospitalized. The care of the patient is much easier and intravenous fluids, O_2 , parenteral medications, and others can be given without difficulty.

Climato-therapy or "move to Arizona" is indicated only in a few cases. Individuals who benefit by the warm, dry climate are the so-called infectious asthmatics who have frequent colds that lead to asthma. It is unfair to say to a person "move to Arizona" without a complete allergic study, as the move may not be indicated. Many people have moved to Tucson, for instance, on the advice of their physician only to develop sensitivity to sugar beet pollen, tumble weeds, and many other agents. As a general rule a change improves the patient for a short while, only to have recurrences. Many patients give up their farms, quit their jobs, sell their houses, leave their families and friends only to return in a few years defeated and depressed over the recurrence of their asthma.

By the way of summary, if a new patient enters your office with bronchial asthma who hasn't had adrenaline or aminophylline take his blood pressure. If it is normal give him adrenaline, if elevated, use aminophylline. Give him a preparation of ephedrine or racephedrine to take by mouth in case of recurrence along with a saturated solution of potassium iodide. Insist on a high fluid intake.

If a patient fails to respond to the usual measures, such as adrenaline and aminophylline, admit him to the hospital. I suggest that he be given an i.v. containing 0.5 grams of aminophylline in 1,000 cc's of 5% glucose in D/W. If cyanotic, use small amounts of oxygen by nasal catheter. He should be given potassium iodide and racephedrine 3 or 4 times daily, and if infection is playing a role antibiotics are indicated. If within 24-48 hours the patient isn't considerably improved one may consider ACTH or Cortisone.

Finally, epinephrine is the most useful and dependable as well as the safest drug in the treatment of bronchial asthma.

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MEDULLARY FIXATION IN FRACTURES OF LONG BONES*

JOHN DOUGLAS CHRISTIAN, M. D., and
SAMUEL B. THOMPSON, M. D.
Little Rock

Medullary fixation in fractures of the long bones is a well established technique in the orthopaedic surgeon's armamentarium. The use of a long medullary bar in such fractures was first employed extensively by Kuntscher in Germany and reported in 1940. His method spread rapidly throughout Europe but was not utilized in this country until 1945, when surgeons became aware of its potentialities through examination of German prisoners treated by this method, and through restoration of the flow of foreign periodicals into the United States with the termination of the war.

Searches of the medical literature revealed that Lambotte in Belgium had utilized a long medullary screw and later a grooved nail in 1907 for fractures of the clavicle and subtrochanteric fractures of the femur. König in 1913 used ivory pegs in long bone fractures with varying success and in 1918 Hey Groves in England treated three compound fractures of the femur with medullary bars.

It is interesting to note that the Rush brothers in Mississippi reported in 1937, three years before Kuntscher's article, an operation of medullary fixation of the ulna utilizing a Steinmann pin. This report was overlooked until Kuntscher's work stimulated interest in the method. Hansen, Street, and Brewer reported a new type of medullary nail and described its use in four cases in 1945. Street and others have since used the method extensively and the literature has been full of reports of medullary nailing.

The chief advantage of medullary nailing is decreased disability. Cast immobilization is seldom necessary except in forearm fractures and this is materially shortened. Early ambulation in lower extremity injuries is allowed and hospitalization is reduced to a minimum. By eliminating external fixation, joint mobilization can be started immediately postoperatively, thereby maintaining range of joint motion and muscle strength. In the elderly, secure fixation allows immediate wheel chair ambulation and obviates the complications incident to enforced recumbency in these patients. The prolonged inactivity necessitated by cast or traction treatment of femoral fractures occasionally results in depressive reactions or frank psychoses in the emotionally unstable. With early ambulation and early return to work, these complications are seldom encountered.

* Read before the 76th Annual Session, Arkansas Medical Society, Little Rock, April 23, 1952.

The chief disadvantage of medullary nailing is danger of infection. Since the advent of antibiotics, the danger has been considerably reduced and in well controlled series of operations utilizing medullary fixation, where strict asepsis has been observed, the incidence of infection compares favorably with other operative procedures on bone. Pinning of fractures by this method requires less exposure of the bone-ends than for plating or screw fixation and, in experienced hands, requires less operating time, thereby reducing the danger of airborne contamination. It is true, however, that if infection occurs, it is apt to be more extensive with a bar of metal extending the length of the medullary canal than with the metallic fixation localized in the region of the fracture.

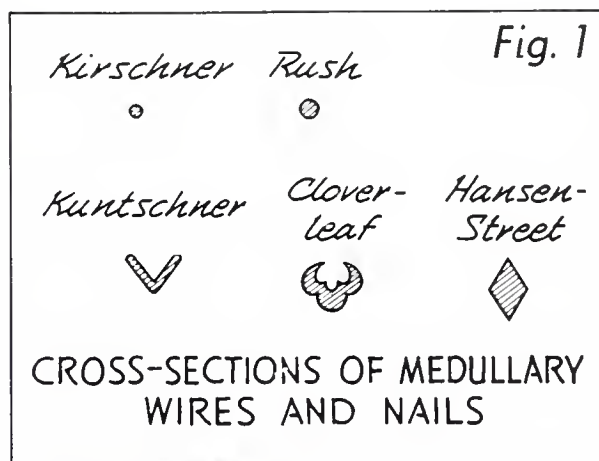
Fat embolism, a much discussed theoretical possibility, since the marrow displaced by the nail is largely fat, has not proved of major importance and is no more common in medullary nailing than in fractures of long bones treated by other methods. Destruction of bone marrow by the nail has not resulted in significant anemia and is of no clinical importance.

Callus formation has been neither stimulated, as claimed by Kuntscher, nor inhibited, as claimed by Bohler. In a series of cases reported by Street, comparing traction, dual plating, and medullary nailing of fractured femora, there was little difference in the time of appearance or of consolidation of callus. With medullary nailing, this consideration is of little clinical importance since, because of the rigid fixation, ambulation can be instituted early, usually in two or three weeks, and it is not necessary to delay weight bearing until union has occurred.

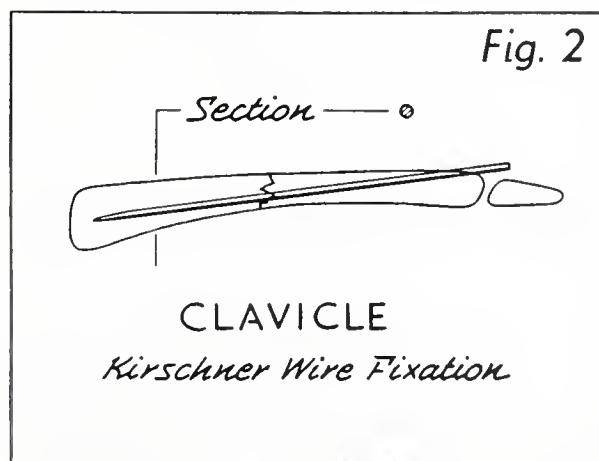
Suitable sites for medullary nailing depend on the bone involved, the nature of the fracture, the extent of soft tissue damage, associated injuries, and the experience of the operator. The most favorable situation is a simple, transverse fracture of the middle two-fourths of the femoral shaft without comminution. Fractures of the clavicle, humeral shaft, metacarpals, and metatarsals unite readily with closed methods but under certain circumstances, such as gross irreducible displacement or instability, medullary fixation can minimize deformity and disability. Medullary pins and nails have not been used extensively in compound wounds but, if contamination is minimal and the injury is treated early, can be utilized to the same advantages, although risk of infection is greater. In extensive compound, comminuted fractures, medullary fixation can occasionally be of benefit to maintain length and position until reconstructive procedures can be performed.

Time does not permit a detailed description of the apparatus necessary for performing this procedure. The operator must have the necessary equipment available. One has but to visualize a long metal rod firmly jammed in the medullary canal of a long bone, protruding through the operative incision, and permitting neither further insertion nor extraction to realize that the proper tool at the right place is mandatory.

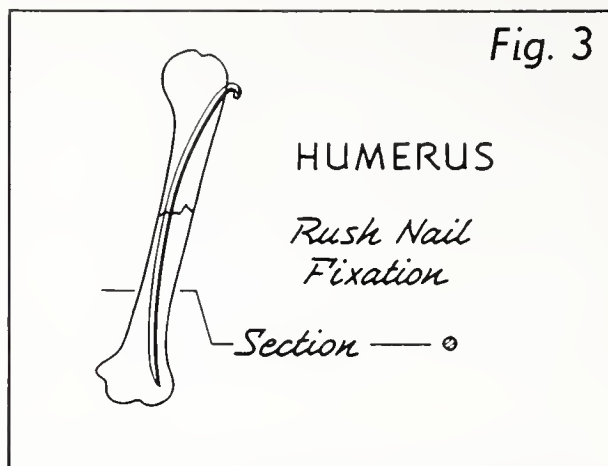
We will show some slides to illustrate our choice of medullary wires and nails in certain conditions.



Slide No. 1 demonstrates cross sections of fixation devices in common use. We have used the Hansen-Street nail exclusively in fractures of the femur instead of the clover-leaf nail designed by Kuntscher. It is easier to insert, requires less apparatus, controls angulation equally as well, and is more resistant to rotational displacement.

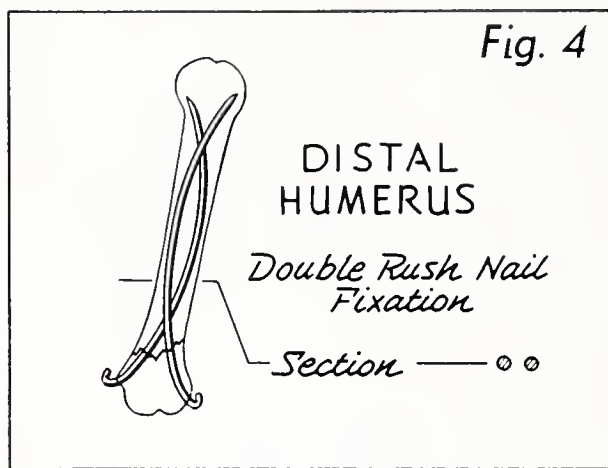


Slide No. 2 demonstrates Kirschner wire fixation of a fractured clavicle. The wire is drilled into the distal fragment through the fracture site, out through the skin, and back into the proximal fragment. The wire is then cut off subcutaneously. This method of treating clavicular fractures is not often indicated but, in a recent combined fracture of the clavicle and neck of the scapula, afforded rigid fixation of the broken col-



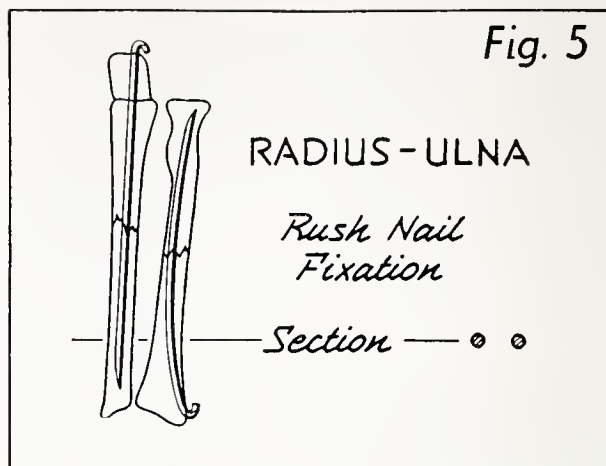
lar bone and allowed early mobilization of the shoulder.

Slide No. 3 demonstrates medullary fixation of a fracture of the shaft of the humerus with a Rush nail. This is inserted through a hole in the region of the greater tuberosity, across the fracture line, and into the distal fragment. Most humeral fractures unite readily in a hanging cast and this method is reserved for widely displaced fractures which will not reduce and for fractures with an associated injury, such as radial nerve damage, requiring open operation.

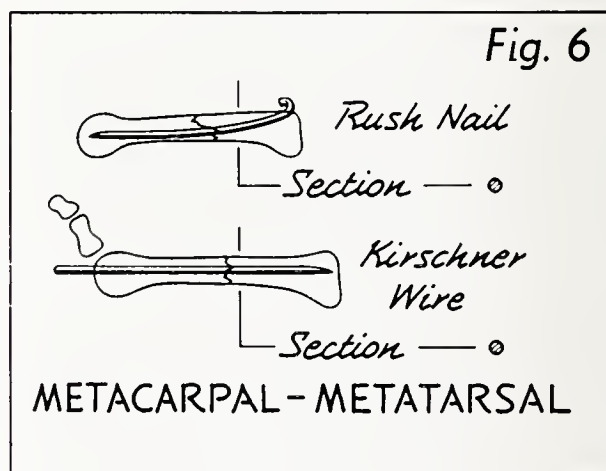


Slide No. 4 shows a supracondylar fracture of the humerus fixed by Rush nails inserted through the epicondyles. This is an extremely effective method of fixing these injuries as the "safety pin" action of the crossed nails affords a strong grip in the proximal fragment allowing early elbow motion.

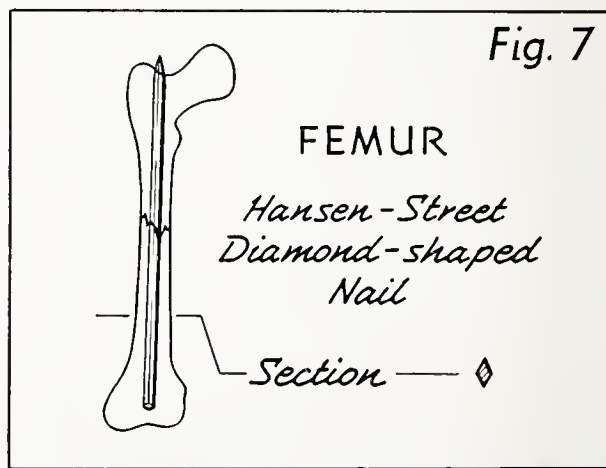
Slide No. 5 illustrates Rush nail fixation for both bones of the forearm. The ulnar nail is larger than the radial nail and is inserted through the olecranon. The radial nail is inserted through the styloid. These both bone fractures of the forearm require postoperative cast immobilization to control rotation, but the cast can be removed in four to six weeks and active joint motion begun.



Slide No. 6 shows a Rush nail in a metacarpal inserted at the base, and a Kirschner wire in a metatarsal inserted through the head. The Rush



nail can be used in both bones, but in the metatarsals, particularly the lesser four, the Kirschner wire through the joint produces no particular disability and is technically easier to insert.



Slide No. 7 shows fixation of a fractured femur with the Hansen-Street nail. This is driven retrograde into the proximal fragment through the fracture site, out through the greater trochanter, and when the fracture is reduced, down into the distal fragment. Note the pointed stud on the

proximal end of the nail. This facilitates passage of the nail through the trochanter and eliminates the danger of explosion fractures at this site.

In comminuted fractures of the femur, as well as of other bones, we utilize supplemental screws to fix intermediate fragments after the method of Street. This provides rigid fixation and allows ambulation with crutches in two or three weeks, as in transverse fractures.

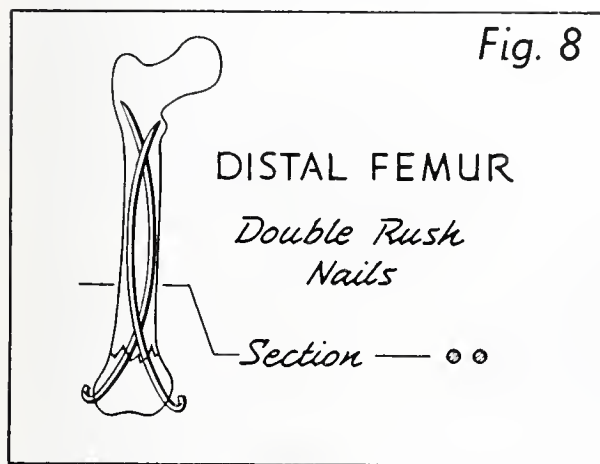


Fig. 8

Slide No. 8 shows double Rush nail fixation of a supracondylar femoral fracture similar to the supracondylar fracture of the humerus.

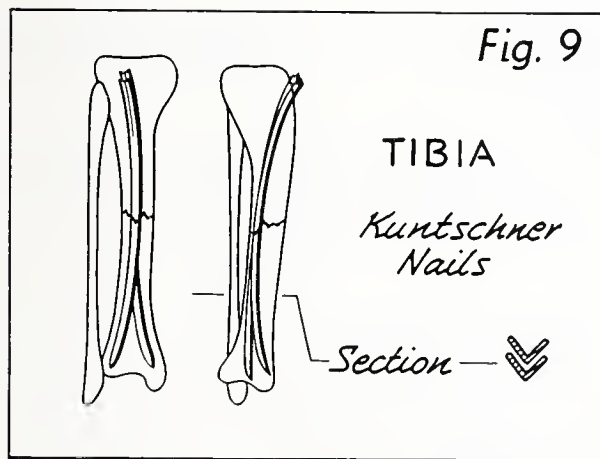


Fig. 9

Slide No. 9 shows Vom Saal's method of fixing fractured tibiae with nested Kuntschner nails. Two or three of these nails are inserted in the region of the tibial tubercle and out the fracture site. They are then spread apart, driven back into the proximal fragment, and after reducing the fracture, driven into the distal fragment. The divergence of the nails in the distal fragment affords a "safety pin" grip and furnishes secure fixation, not requiring cast immobilization.

We have not utilized this method but on the basis of Vom Saal's report in January, 1952, believe that it has merit and intend to adopt it for suitable cases.

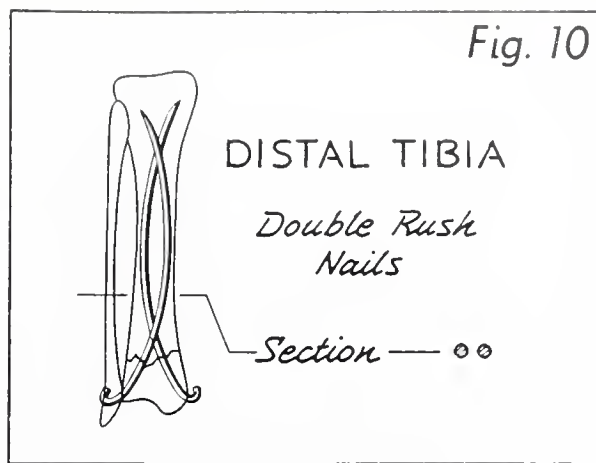


Fig. 10

Slide No. 10 shows utilization of double Rush nails in a supramalleolar fracture of the tibia. This is similar to fractures just above the knee and elbow but is technically a little more difficult because of the presence of the fibula.

In summary, medullary fixation is the treatment of choice in many fractures of long bones. Its chief advantages are decreased disability because of early joint mobilization, and early return to work because of rigid fixation. The chief disadvantage is danger of infection but the incidence of this is no greater than in other open methods of fixing fractures. Experience with the operative procedures and adequate apparatus are mandatory. Choice of pins or nails depends on the mechanical factors involved and the preference of the operator. With increased experience in utilizing medullary fixation of fractures, it is reasonable to expect that better techniques and equipment will be developed and that a wider range of fractures will be manageable by this method.

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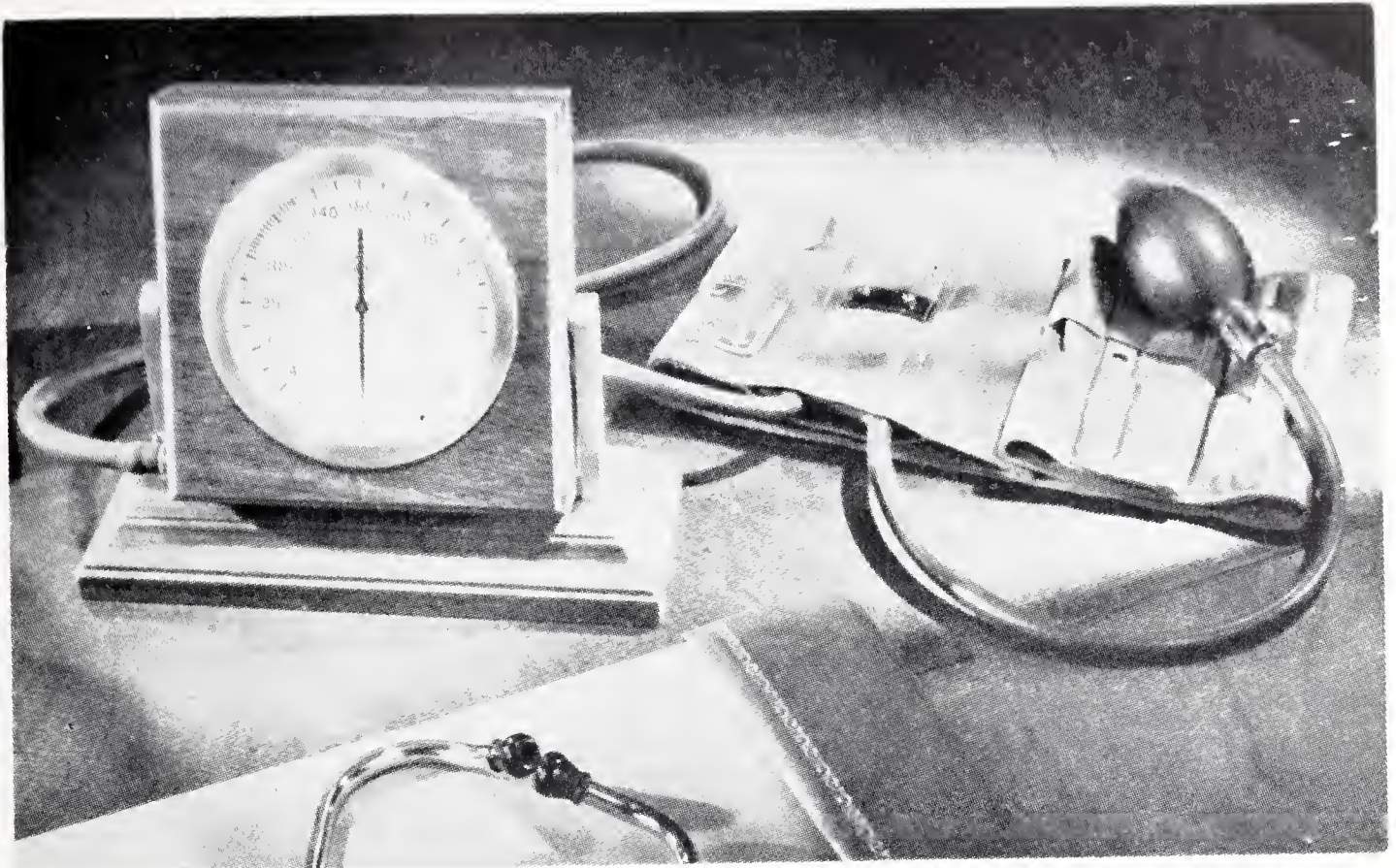


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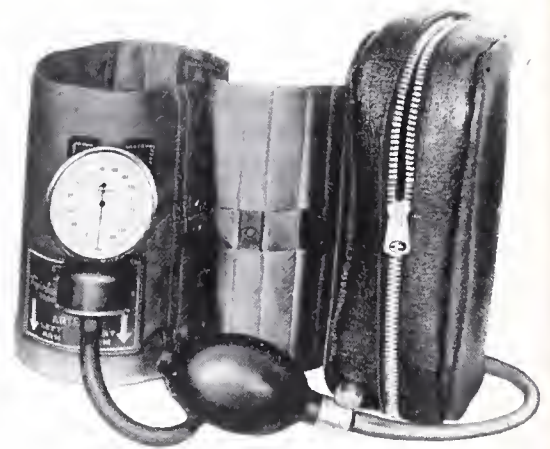
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RESOLUTIONS

Resolutions Reaffirming Support of Senator Bricker's Senate Resolution No. 177 of the 82nd Congress

WHEREAS, the Association of American Physicians and Surgeons in regular session assembled the 6th day of October, 1951, adopted a resolution favoring passage of Senator Bricker's Senate Resolution No. 177 (82nd Congress), which would limit future treaty commitments to such areas as (1) those which would not abridge individual freedom and (2) those which would not be unconstitutional if passed as domestic law, and

WHEREAS, the Association of American Physicians and Surgeons on October 6, 1951, memorialized the Congress to pass whatever legislation is necessary to relieve this country of any and all treaty commitments made through the United Nations organizations, and

WHEREAS, a new Congress (the 83rd) will convene in January, 1953, and many members of it will not be cognizant of the Association's previous actions.

THEREFORE, BE IT RESOLVED that we, the members of the Pulaski County Medical Society, do hereby affirm our support of Senator Bricker's Senate Resolution No. 177 (82nd Congress), or equivalent legislation to be introduced, and renew their plea to the 83rd Congress to enact whatever legislation is necessary to relieve this country of any and all treaty commitments made through the United Nations organizations.

BE IT FURTHER RESOLVED that a copy of this resolution be spread upon the Minutes of this Meeting and that copies be sent to (1) the President of the United States, (2) all members of Congress, and (3) all state and county medical societies.

Approved by
Pulaski County Medical Society
December 1, 1952.

Resolution to Eliminate Nationalized Medicine Section of Public Law 590

WHEREAS, the Congress of the United States on July 5, 1952, enacted legislation HR-7800, now Public Law 590, which includes the mechanism to provide nationalized medicine for approximately one-fourth of the nation's population in the event that enabling legislation for implementation is enacted on or before June 30, 1953, and

WHEREAS, consummation of such a program would be inimical to the public welfare.

THEREFORE, BE IT RESOLVED that we, the members of the Pulaski County Medical Society do hereby urge the Congress of the United States not to enact such enabling legislation to nationalize medical care for a large segment of our population.

BE IT FURTHER RESOLVED that a copy of this resolution be spread upon the Minutes of this Meeting and that copies be sent to (1) the President of the United States, (2) all members of Congress, and (3) all State and county medical societies.

Approved by
Pulaski County Medical Society
December 1, 1952.

Resolution on ILO

WHEREAS, the International Labor Organization, meeting in Geneva in June, 1952, has approved a Convention (treaty) on minimum standards of social security in nine fields—medical care, sickness benefits, unemployment benefits, old-age benefits, unemployment injury benefits, family benefits, maternity benefits, invalidity benefits and survivor benefits, and

WHEREAS, ratification of this Convention by the United States Senate would place this country under obligation to put at least four of the nine programs in operation, and

WHEREAS, ratification of the Convention by the United States Senate would be a step towards plunging this nation further into nation-destroying Socialism, and

WHEREAS, the United States Congress in 1935 voted this country a member state of the International Labor Organization without public hearings or debate.

THEREFORE, BE IT RESOLVED that the members of the Pulaski County Medical Society recommend and urge the Senate of the United States not to ratify this Convention and to withdraw this country from membership in the International Labor Organization.

BE IT FURTHER RESOLVED that a copy of this resolution be spread upon the Minutes of the Meeting and that copies of it be sent to (1) all members of the Senate and (2) all State and county medical societies.

Approved by
Pulaski County Medical Society
December 1, 1952.

Resolution on Support of H. J. Res. 491

WHEREAS, the Association of American Phy-

sicians and Surgeons in regular session assembled the 6th day of October, 1951, adopted a resolution to petition the Congress to preserve the intent and purposes of the Constitution by initiating an amendment to the Constitution, for submission to the people of the various States, to provide that:

"Section 1. The Government of the United States shall not engage in any business, professional, commercial, financial, or industrial enterprise except as specified in the Constitution;

"Section 2. The Constitution or laws of any State, or the laws of the United States, shall not be subject to the terms of any foreign or domestic agreement which would abrogate this amendment;

"Section 3. The activities of the United States Government which violate the intent and purposes of this amendment shall, within a period of three years from the date of the ratification of this amendment, be liquidated and the properties and facilities affected shall be sold to private or municipal organizations properly empowered to own and operate such enterprises;

"Section 4. Congress shall have the power to provide the means and prescribe the rules for the orderly transfer of such properties and facilities as are affected by the amendment, within the time limit prescribed, taking necessary precautions to provide against disturbances or disruptions of service."

and,

WHEREAS, Congressman Ralph W. Gwinn on June 28, 1952, introduced into the House of Representatives H. J. Res. 491 which proposes an amendment to the Constitution of the United States relative to calling of a convention to consider an amendment to the Constitution to prohibit the United States Government from engaging in business in competition with its citizens.

THEREFORE, BE IT RESOLVED that we, the members of the Pulaski County Medical Society do hereby express our full support of H. J. Res. 491 and urge the Congress of the United States to support and pass H. J. Res. 491 as soon as possible after the convening of the 83rd Congress in January, 1953.

BE IT FURTHER RESOLVED that a copy of this resolution be spread upon the Minutes of this Meeting, and that copies be sent to (1) the President of the United States, (2) all members

of Congress, and (3) all State and county medical societies.

Approved by
Pulaski County Medical Society
December 1, 1952.

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Chairman of Section on General Practice,
Southern Medical Association

(A 5-minute talk given over WQAM, Miami, Fla., on their "Tell Me Doctor" Program, November 11, 1952)

Good afternoon, friends:

I have often taken my newspaper friends to task because they write so much about the "freedom of the press" and its privileges and then devote so little space to the "duty" of the newspapers and of the press. By this same token it seems to me some physician should speak of the "duties" of the medical man. I think we may safely skip over the privileges accorded a physician. They are too numerous and too well known to be repeated here.

I will dwell, then, on the physician's duties. One wise philosopher has said that a physician treats the **present**, with a knowledge of the past and an eye to the future. This acknowledges that the **duty** of the physician may be divided into three parts.

The first of these is **knowledge**—the most important tool in any man's command and needs no further explanation.

Second: **The eye to the future**—is but a simple method of saying that a physician works with the expectation of a relief of the suffering and, if possible, a cure of the disease.

That leaves the treatment of the present as my main theme.

The duty of a physician is to care for those who come to him for services, as a friend, and as a confidant, and this treatment must be given on the highest ethical standards. This does not mean that every doctor must treat every case that comes to him, but it does mean that the physicians in any community must see that the medical needs of that community are taken care of down to the last man and at a fee which is fair to both. It means that the physician must offer consultation on matters affecting the general welfare and the public health. It means that he who takes a patient must treat that patient with all the **knowledge, art, and kindness**, that he possesses.

I pity those of you who do not have as a personal friend, a family physician. It is a sound health principle to have a family doctor who can and who will call on you at any time as a friend or as a man of science. And family doctors are not extinct. You can find them in your home town—in Dade County.

They cannot ethically solicit you as a patient. You must go to the doctor of your choice. If he cannot be your friend, seek further for your medical care. The public will have the kind of medical service that it desires. The medical profession is anxious to guide the public so that it gets the very best.

"FREE"

We were impressed by an anecdote in a sermon by the Rev. Kenneth W. Sollitt, pastor of the First Baptist Church of Mendota, Illinois: "I was once in a small hotel in Vermont when one of the guests, a foreigner unfamiliar with American ways, brought the proprietress of the inn a beautiful bouquet. The proprietress was delighted beyond words—until she discovered that her gallant guest had picked the flowers in her garden back of the inn. Whenever government hands you a bouquet, you can be perfectly sure it was picked out of your garden. But we go right on accepting bouquets in the vain hope that some day we will get flowers that somebody else planted and brought to bloom." Add the fact that the bureaucrats never pick a bouquet without charging a commission, and Dr. Sollitt has stated it precisely.

Chicago Daily News, November 27, 1951.



EDITORIAL TUBERCULOSIS CONTROL*

Tuberculosis is the outstanding communicable disease problem of the State of Arkansas, and among our greatest public health problems. The practicing physicians of the state could best help eradicate this disease by developing an increased awareness of the high prevalence of tuberculosis; being ever mindful of the possibility of the presence of early, asymptomatic infection in each patient who comes under their care. A vital necessity in the control of tuberculosis is early diagnosis. The majority of the newly discovered cases today are already in an advanced stage, requiring long periods of time for cure of the disease. This is strikingly borne out by the fact that, of the 2,092 newly reported cases in 1951, over 1,238 of the patients had advanced disease before diagnosis. Even more deadly, one fifth or 398 already had a positive sputum at the time the disease was discovered. How many other persons infected by these sources will never be known.

Patients requiring prolonged hospitalization require careful preparation for months of sanatorium stay if the patient is to remain in the institution in a relaxed frame of mind. Co-operation between the family physician and personnel of the local health unit can be very effective in assisting the patient to get his family and financial affairs in order before ever leaving for the sanatorium. Such far-sighted planning would materially decrease the number of dissatisfied patients and those leaving the tuberculosis institution against medical advice.

When the tuberculosis patient returns to his home community with his disease arrested or inactive, he goes through the most critical stage in recovery, since this is a trial period on real exercise which either assures his complete recovery or leads to a future breakdown. Assistance and guidance by the family physician during this critical period aids greatly in the ultimate return of the patient to health.

The survey chest X-ray program of the Division of Tuberculosis Control of the Arkansas State Board of Health is designed to assist the family physician in the early diagnosis of chest diseases. Familiarity of the physician with the purposes and details of this program enables it to fit smoothly into the over-all service to the patient.

No person is X-rayed until a family physician has been named, and this doctor's name is written

on the X-ray report card. This is an inflexible rule. This physician is then sent the reports on all "suspects" who have given him as their family doctor. It should be recognized that the patient may decide to go to another doctor in the meantime; also that physicians will receive reports on patients that they have never served before. A duplicate report will always be gladly sent to any physician requesting such, and the survey X-ray films will be promptly sent to any doctor for his scrutiny.

The patient is **never** told a diagnosis by the health unit, but is only informed that something suspicious which requires further investigation has been found on the survey X-ray. He is informed that the X-ray report has been sent to the physician named at the time the film was made and that this physician is expecting a visit from the patient. The physician should remember that some explanation on his part to the patient may be necessary as to the reasons for the follow-up work.

The technical clarity and definition of the chest shadows on the survey films are extremely good and the X-rays are all interpreted by quite competent doctors. Since this is a screening procedure for apparently well individuals, attention is called to even the slightest suspicious shadow. A confirmatory standard chest X-ray, made by the private practitioner is essential, as the health department does not make such films. Because of the critical interpretation of the survey film, many of the suspicious cases will finally be judged to be of no clinical significance as a result of the complete physical examination and the recheck standard X-ray. These patients are quite likely to feel that they have been unnecessarily inconvenienced or that their money for the recheck examination has been wasted unless the physician is careful to explain that this time and money has bought them some of the best possible health insurance. The patient has also "stored up treasures" since these chest films will always be on file; available for comparison with any future plates.

Positive findings by the chest X-ray surveys are of such an early character in the majority of cases that the presence of the pathology is undetectable by our ordinary methods of physical examination and demonstrable only by X-rays. Fluoroscopy alone, is not a sufficient follow-up

procedure. A recheck standard size chest X-ray is the physician's best assurance that disease is or is not present in the lungs. Failure to employ this very definitely indicated procedure may result in the embarrassing return of the patient to the doctor some months later with full-blown, incurable disease.

Standard-size chest X-rays made by the private practitioner may be sent to the Division of Tuberculosis Control of the Arkansas State Board of Health for consultative interpretation without charge. All previous chest X-rays should accompany the current film for comparison, and a competent history is essential in enabling the consultant to arrive at a correct estimation of the case.

The private physician can materially help in formulating a true picture of our state tuberculosis situation by promptly reporting all cases of tuberculosis coming under his care for the first time; special report cards are obtainable from the local health unit or from the State Health Department. Please bear in mind that cases examined in the sanatoria out-patient departments are not considered to be reported until the final diagnosis is received by the health unit from the family physician.

One of the major difficulties experienced in curing tuberculosis is in the maintaining of the patient under constant medical supervision for the protracted length of time so frequently necessary. The public health units are chiefly responsible for getting the strays back into the fold. These patients wander around from place to place, and keeping track of them is a major undertaking in itself. The family physician can thus see that the health units will have to contact them periodically to see whether the patient is remaining under their care.

The conduct of this chronic, contagious disease necessitates the education of both the patient and his family in many matters of both medical and social import. The public health nurses are especially trained to serve as the physician's right hand if the doctor will call on the health unit for this service. Much time can be saved the busy private practitioner by having a broad "standing order" on which the health unit may operate when called by the physician. Routine sputum collections and temperature determinations plus instructions as to sanitary precautions where indicated would thus be done.

Tuberculosis is not being controlled in the State of Arkansas at the present time. Increased collaboration between the family physicians, the sanatoria, and the public health units is essential if this disease is to be wiped out. The private physicians could help this project more effectively by having an increased awareness of the high prevalence of the disease, with consequent earlier diagnosis; prompt reporting of all newly-discovered cases; use of the public health personnel in patient and family education; and over-all community education as to the prevention of spread of the causative organisms.

*Contributed editorial from The Arkansas State Board of Health, J. T. Herron, M.D., Director.

OBITUARY

GEORGE E. CANNON, age 82, Hope, died suddenly November 17th. Born at Ozan, he graduated from Ouachita College and received his medical degree in 1898 from the Kentucky School of Medicine. He built the Josephine Hospital at Hope in 1915 and built and donated the Hempstead County Memorial Library in 1947. He was a member of the Hope Baptist Church and founded and taught its Service Sunday School Class for 25 years. He was the author of "Night with Christ." Ouachita College conferred on him the honorary degree of Doctor of Laws in 1949. He was an honorary member of the Hempstead County Medical Society and of the Arkansas Medical Society, a fellow of the American Medical Association and of the American College of Surgeons. Surviving relatives are his wife, a son and three daughters.

C. E. ROE, age 68, Viola, died November 18, 1952, at his home after an illness of several months. Born August 17, 1884, at Henderson, Arkansas, Dr. Roe married the former Sarah Elizabeth Ducker in 1904, in Pineville, Arkansas. He attended the University of Arkansas School of Medicine. He gave up his practice for a few months to play professional baseball with such teams as Eastern Arkansas with Wynne, Southern Arkansas with Pine Bluff, Southern Association at Memphis and played semi-professional baseball for approximately 25 years. Dr. Roe began his practice at Wild Cherry, Arkansas, where he practiced for only a short time before moving to Ash Flat, Arkansas, to practice for two years, 1915 and 1916. He then moved back to Wild Cherry

and practiced there until December of 1923, at which time he moved to Viola where he practiced until a short time before his death. He was a member of the Methodist Church, a Mason and worked with the Eastern Star. Surviving are his wife and six children, among them is "Preacher" Roe, the famous Brooklyn Dodger baseball player.

OSCAR T. COHEN, age 64, Jonesboro, died November 13th. Born in Fredericktown, he graduated from Mercer College and received his medical degree from Vanderbilt University School of Medicine in 1911. He did postgraduate work in New York until he located in Jonesboro in 1916 for the practice of eye, ear, nose and throat. Surviving relatives are his wife, a son and a daughter.

SPARKS FROM THE SECRETARY

November 23, 1952 Your secretary attended the combined meeting of the Council on National Emergency, and the Washington AMA office at Memphis. People from Arkansas were more numerous than those from Tennessee, Kentucky, and Mississippi. We were well represented with President Drennen, Schaefer, Peeler, Gray, Brown of Hot Springs, Charles Henry, Lawyer Eugene Warren at this meeting. It was well worth while and much was done. You will find the report elsewhere.

December 10, 1952 Yours truly accompanied Gene Warren and a member of his firm to represent the AMS in the office of the Chairman of the Workmen's Compensation Commission, Dave Peel. The purpose was to object to the awarding of payments for workmen's compensation to chiropractors as this is definitely against the present law. Let me assure you that Mr. Peel is quite a politician! Also let me assure you that Mr. Warren is quite a lawyer!

PUBLIC RELATIONS INSTITUTE

As the initial step in its program for intensive study of public relations within the Society, the Committee on Public Relations held its first public relations institute in Little Rock November 20. Fifty-eight physicians, an exceptional response, were in attendance and much enthusiasm was manifested for the work of the committee in its goal of interesting each county society and each individual member in full comprehension of the value of good public relations. The committee is working diligently to bring to the attention of physicians the manner and extent to which they may not only cooperate with the state committee but how they may themselves act as public relations representatives of medicine.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

TODAY'S TUBERCULOSIS PROBLEM IN ARIZONA, A STUDY OF PATIENTS' ORIGINS

By ELEANOR C. CONNOLLY and
MARTHA CARR JONES

Statistical Service, National Tuberculosis
Association, June, 1952.

Climate is not and never has been a substitute for hospital care in the treatment of tuberculosis and the delusion that it is, has cost many lives. Proof that this statement is still valid has been furnished by a study of the origins of tuberculous patients in Arizona initiated in the Fall of 1950 by the statistical service of the National Tuberculosis Association.

The study was exploratory and, of necessity, limited in scope. A complete assessment of the tuberculosis situation was impossible. Complete information is not available on the supposedly high but incompletely reported number of tuberculous patients in Arizona.

Except for the tuberculosis death rate, factual data on the tuberculosis control problem in Arizona are largely lacking. In 1950, Arizona's provisional death rate from tuberculosis was 68 per 100,000 population, the highest in the United States; this rate is almost double the recorded rate of nearby New Mexico—a state which has a significant amount of tuberculosis and many of the same problems as does Arizona. If the population of Arizona continues to expand—and there is every indication that it will—and if the tuberculous are not isolated, exposure to tuberculosis will continue to be a health hazard to everyone in this state.

The study of patients' origins was based on a review of the records of 1,735 tuberculous patients under medical care in Phoenix and Tucson. Certain personal data, place and time of diagnosis, history of hospitalization, length of residence in Arizona, and welfare status were ascertained. Although the analysis was partial, the information acquired by means of this study helps to determine the character of the tuberculosis problem in Arizona. The records studied included an approximately equal number of patients receiving public and private medical care.

Only one-fourth of the patients whose records

were reviewed were of Spanish descent. Most were among the public patients. Arizona's position as a newcomer among the states is reflected in the fact that only 11 per cent of all patients were natives of Arizona. Most of these were of Spanish descent. Of all the patients studied approximately one-third had lived in Arizona less than five years prior to 1951. On the other hand, one-third of those receiving public care and 13 per cent of the private patients had lived in the state at least 20 years.

More than half the patients studied had been definitely diagnosed tuberculous before coming to Arizona. Three-fourths of the patients under private medical supervision were diagnosed prior to arrival in the state; on the other hand, of those medically indigent persons treated by means of public funds, only one-third had been diagnosed outside Arizona. Illinois, Ohio, California, Texas, and Michigan contributed the largest number of known tuberculous patients to Arizona.

Forty per cent of the patients studied were diagnosed as tuberculous in Arizona; of this group, 38 per cent had lived in the state at least 20 years before they discovered they had the disease. Only one out of five of these patients was diagnosed within five years after his arrival in the state.

The majority of the patients diagnosed prior to arrival had been hospitalized in other states, and this is true of many more private patients than of those whose care is paid for by public funds. Of the patients hospitalized elsewhere, 40 per cent came to Arizona less than a year after leaving tuberculosis hospitals.

Of the patients under public care for tuberculosis, more than half had sought aid from public or private welfare agencies or from both. More than half the patients whose records were reviewed had active tuberculosis at the time of the study; of those whose stage of disease was known, the great majority were diagnosed as far advanced, while only six per cent had minimal tuberculosis.

The large Spanish and Indian groups in the state plus a focus of infection among persons of Anglo-American nationality, some of it imported years ago and some of recent origin, produce an extremely high prevalence of tuberculosis in the state. This tuberculosis problem cannot be controlled with the present diagnostic and treatment facilities and the small number of available beds—523 exclusive of those in federal hospitals.

Unfortunately for Arizona, the state will probably always attract the "respiratory cripple" since its climate enables him to live more easily if not unduly harassed by economic problems. The numerous individuals with active and arrested disease who live there may always constitute a focus of potential infection out of proportion to that in other states. Moreover the indigenous Spanish and Indian groups, apparently with high susceptibility to tuberculosis, are themselves large enough to account for Arizona's high prevalence of tuberculosis.

No state can afford to ignore a troublesome situation because it is partially caused by persons who did not originate there. It is not possible to trace the antecedents of every patient for generations in order to place the responsibility for his disease in another state; in fact, according to this report, almost 40 per cent of the persons diagnosed inside Arizona had lived in the state 20 or more years.

The ingrained though erroneous conviction of many Arizona residents that tuberculosis does not affect the state's indigenous population has led to an unusual situation, in that the state does not provide hospital and other public health facilities for even its own tuberculous residents, to say nothing of the numerous visitors, sick and well, who are attracted to the state as a result of exploitation of the mild climate.

Every state has an obligation to protect all its citizens from persons with active disease, whether they are residents or non-residents. Arizona today needs as a minimum at least 1,000 additional beds for tuberculous patients, no matter what standard of hospitalization is applied.

It is obvious that the program of education for the general public has failed to convince a great many persons that tuberculosis is a disease which is best treated in hospitals and not by climate. One wonders whether the education of individual patients by their own physicians is as thorough as it should be.

A vigorous program of general education concerning the ineffectiveness of climate as a cure for tuberculosis should be carried on by public

and voluntary agencies, notably the National Tuberculosis Association and its constituent associations. Such a campaign should be directed not only to the American population at large, but to welfare agencies throughout the country, both public and private, and to the medical profession as well. It should be emphasized by every possible means that the man or woman with active tuberculosis cannot substitute climate for hospital care without grave danger to himself and those in contact with him.

PROCEEDINGS OF SOCIETIES

NOTICE: Secretaries of country medical societies are urged to discuss with their organizations enrollment of physicians in the Association of American Physicians and Surgeons and to take steps to further the essay contest sponsored by that Association in high schools. Further information may be obtained from Ellery C. Gay, Donaghey Building, Little Rock.

Members of the Arkansas Medical Society are invited to attend a sectional assembly of the International College of Surgeons to be held in Dallas, February 5-7, 1953.

The Sebastian County Medical Society has elected the following officers: President, Marlin B. Hoge; Vice-president, John D. Olson; Secretary, E. Z. Hornberger; Treasurer, Robert Thompson, and Member, Board of Censors, L. Murphey Henry.

Ouachita County Medical Society has elected the following officers: President, James Guthrie; Vice-president, J. L. Dedman; Secretary, R. B. Robins (28th term); Delegate, L. V. Ozment, and Alternate, L. E. Drewery.

The Independence County Medical Society met in dinner session at Batesville December 8th, electing the following officers: President, C. W. Taylor; Secretary-treasurer, Ruth Junkin; Delegate, W. H. Calaway, and Alternate, C. A. Taylor. Following the business sessions, the Society and Auxiliary held a social meeting.

PERSONALS AND NEWS ITEMS

W. M. Gross, Fort Smith, spent a recent vacation in Texas.

G. R. Siegel, Clarksville, addressed the Ozark PTA recently on "Flag Poles without Flags."

H. W. Savery, Van Buren, addressed the Craw-

ford County Memorial Hospital Guild December 11th.

W. F. Adams, Fort Smith, spent a Christmas vacation in Texas.

I. J. Spitzberg, Little Rock, recently received a citation for meritorious service from the Arkansas State Boxing Commission.

W. C. Hays has been elected a director of the Marianna-Lee County Chamber of Commerce.

The following were registered at the Denver session of the American Medical Association: Ruth Ellis Lesh, Fayetteville; Art B. Martin, Fort Smith; Earle H. Hunt, Clarksville, and W. R. Brooksher, Fort Smith.

Wayne Stone has joined the staff of the DeQueen Clinic.

Physicians of Earle were honored at a reception given by the Earle Rotary Club November 11th.

The following were announced as contributors to the American Medical Education Foundation during October: Troy M. Price, Strong; R. B. Robins, Camden; L. J. Rosenzweig, Hot Springs National Park; D. E. White, El Dorado, and Carl L. Wilson, Fort Smith.

A. C. Curtis has resigned from the Arkansas State Board of Health to enter service with the United States Public Health Service.

F. F. Ferguson, Nashville, and Gordon P. Oates, Little Rock, have been recalled to active duty with the Naval Medical Corps.

Sam Phillips, Little Rock, attended the recent meeting of the American Academy of Pediatrics in Chicago.

In attendance at the Chicago session of the American Academy of Dermatology and Syphilology were D. W. Goldstein, Fort Smith, and Ellis P. Cope, Lawrence Zell, Paul Fulmer and Calvin J. Dillaha, Little Rock.

The Wallace Sanitarium, Memphis, has elected the following staff officers: Chief of Staff, Samuel Paster; Assistant Chief of Staff, Marvin Latham, and Secretary, James A. Wallace.

WOMAN'S AUXILIARY NEWS

A beautiful fall luncheon was held Friday, October 2 and 3 at the Town House by members of the Bowie-Miller Medical Auxiliary honoring the wives of doctors in attendance at the Tri-State Medical Society meeting held in Texarkana Thursday and Friday.

The tables were festive with arrangements of vari-colored chrysanthemums in fall shades, with smaller arrangements in the same colors as the centerpiece. Small boxes of candy were at each guests' place.

Mrs. Cyrus P. Klein, President of the Bowie-Miller Medical Auxiliary, presided at the luncheon and introduced the visiting officers. Mrs. Thomas E. Strain, of Shreveport, President of the Louisiana Medical Auxiliary, was a guest speaker. She talked on the projects and aims of the Louisiana Medical Auxiliary.

Mrs. Robert F. Thompson, of El Paso, President of the Texas Medical Auxiliary, spoke to the women on the importance of voting and assuming one's duties as a citizen.

Mrs. John E. Hill, of Marshall, Fifteenth District, Medical Auxiliary of Texas Council Woman, gave a talk on her work with the state Auxiliary.

A coffee for the visitors and local members was held Friday morning at the home of Dr. and Mrs. Reavis Pickett.

On Thursday, October 30 the Bowie-Miller Medical Auxiliary met for a luncheon and business meeting at the Grim Hotel. After a business meeting a very timely and informative talk by Mrs. Charles Bintliff was given.

On November 25 the Bowie-Miller Medical Auxiliary met for their regular meeting at the Grim Hotel. Upon a recommendation by the Medical Society, it was decided to sponsor a picture show short if one of the local theaters will make the time available. This film short is available to medical societies through the A.M.A., and concerns the family doctor and his service to the community.

Our next meeting will be the Christmas Party for Auxiliary members and husbands to be held at the Country Club, the date of which will be announced.

Mrs. William Harrell,
Publicity Secretary.

The Sebastian County Medical Auxiliary met for a luncheon December 1 with 12 members present.

During the business meeting the importance of adding fluoride to the city water was discussed and the need for doctor's wives to be informed about the subject.

There will be no January meeting.

Mrs. Louis O. Lambiotte,
Publicity Chairman.

The Independence County Medical Society and Auxiliary held their annual Christmas party on December 9th. Thirty-six were present. After a short business meeting all enjoyed the social hour and exchange of gifts.

Mrs. O. J. T. Johnston,
Publicity Secretary.

The monthly luncheon meeting of the Woman's Auxiliary to the Boone County Medical Society was held at 12:00 noon at the Hotel Seville, Harrison, November 4, 1952. Mrs. Gordon P. Oates, State President of the Medical Auxiliary, was honor guest, and was presented with a gift from the local Auxiliary.

Following the luncheon, the group adjourned to the home of Mrs. Ross Fowler, President of the Boone County Auxiliary for the business meeting. The meeting was called to order, 11 members answered roll call.

Mrs. H. V. Kirby, Mrs. F. B. Kirby and Mrs. J. G. Gladden, the County Home Committee, reported on their investigation and gave their recommendations as to what could be done with the Boone County Home.

Mrs. Gordon Oates reported her trip to the A.M.A. Convention, which was held in Chicago, Ill. Also explained about the various phases of work of the State Medical Auxiliary and the committees which had been formed.

The meeting adjourned to meet again December 2, 1952.

Secretary.
Mrs. O. B. McCoy,

BOOK REVIEW

Dr. Colwell's Daily Log for Physicians. Colwell Publishing Company, Champaign, Illinois. Price \$6.00.

How an individual physician can efficiently keep his business records without this book is something we can not understand.

Advances in Medicine and Surgery. From The Graduate School of Medicine of the University of Pennsylvania. 441 pages with 43 figures. Philadelphia & London: W. B. Saunders Company, 1952. Price \$8.00.

This is the presentation of popular courses by the Graduate School of the University of Pennsylvania in an effort to bring the information to more physicians through publication. The present volume covers the role of potassium, hypertension, pulmonary infection, the adrenocortical hormones and other important subjects with the authority of leaders in the respective fields and will prove valuable to physicians who seek to keep current with medical advances.

Synopsis of Pathology. By W. A. D. Anderson, M.A., M.D. F.A.C.P., Professor of Pathology, Marquette University School of Medicine; Pathologist, St. Joseph's Hospital, Milwaukee, Wisconsin. Cloth. Price \$8.00. Pp. 788, with 334 text illustrations and 13 color plates. The C. V. Mosby Company, St. Louis, Missouri, 1952.

The fact that the "Synopsis of Pathology" has undergone three editions in a matter of ten years is adequate testimony to the widespread popularity of this book with the medical profession. In a brief, concise form which includes all of the pertinent information it gives wide coverage to the subject of Pathology.

In the third edition there has been added information on the LE phenomenon, cytological diagnosis of neoplastic cells and descriptions of more recent pathological entities such as pulmonary adenomatosis and Beryllium granulomatosis. The busy practitioner will find this book of great value in reviewing the subject of Pathology. It should also be very useful to interns and residents. The volume reflects in a more concise form the information contained in Dr. Anderson's larger text on Pathology.

Diagnostic Bacteriology. By Isabelle Gilbert Schaub, A.B., Technical Director, Clinical Bacteriology Laboratories, The Johns Hopkins Hospital; Instructor in Bacteriology, The Johns Hopkins University School of Medicine and the Nurses Training Schools, the Johns Hopkins Hospital and Sinai Hospital; and M. Kathleen Foley, M.A., Instructor in Bacteriology, Department of Biological Sciences, College of Notre Dame of Maryland; Formerly Bacteriologist in Charge of the Diagnostic Bacteriological Laboratory of the Medical Clinic, The Johns Hopkins Hospital. Cloth. Price, \$4.50. Pp. 356. The C. V. Mosby Company, St. Louis, Missouri, 1952.

This volume is as the author states, "a text in diagnostic bacteriology" which should find wide usage in clinical laboratories. It approaches the subject of medical bacteriology from the point of view of isolation and identification of pathogenic organisms. It is divided into five principal divisions. The first part deals with bacteriological methods, including staining procedures, selection and sterilization of media and preparation and uses of solid media for the isolation of bacteria. The second part deals with bacteriologic diagnosis and includes discussions on procedures for cultivating bacteria from clinical and autopsy material. This portion of the book should be extremely useful to laboratory technicians and hospital bacteriologists.

Part three contains complete information on the determination of the sensitivity of bacteria to antibiotics by both the serial dilution and paper disc methods. Part four is devoted to serologic diagnosis, including both agglutination tests on patients' serum and the serologic identification of organisms. Part five is devoted to methods of preparing media, staining methods and preparation of reagents and tests for bacteria.

The contents are well indexed and the information contained in this volume when used in conjunction with a text of bacteriology, should provide most of the information necessary for the competent functioning of bacteriological laboratories in hospitals. It is highly recommended to all persons interested in bacteriological diagnosis.

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THE VALUE OF BRONCHOSCOPY AND BRONCHOGRAPHY IN THE DIAGNOSIS OF PULMONARY DISEASE*

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Man has always been fascinated by the unknown, and nothing intrigues him more than to be able to explore. Endoscopy is in many respects a most stimulating and rewarding form of exploration, for one never knows with certainty what one may encounter in an endoscopic examination, or the benefit the patient may derive.

Although Killian, in 1897, developed the first satisfactory bronchoscope, it was not until the past twenty-five years that bronchoscopy came into general use. Probably the greatest obstacle to the earlier routine employment of bronchoscopy in the study of pulmonary disease was lack of knowledge on the part of the medical profession that it was an examination that could be carried out with safety and with minimal discomfort to the patient. Today, bronchoscopy is regarded as an integral and important method of examination in all well-organized thoracic clinics and as a procedure that should be available in all large general hospitals.

Before discussing the indications for bronchoscopy, it is well to point out that the occasion seldom arises in which the procedure should be employed before the patient has had the benefit of a complete general examination. If the patient has a cough associated with expectoration, a roentgenogram of the thorax should be made and the sputum should be examined for *Mycobacterium tuberculosis* and carcinoma cells.

What are the general indications for bronchoscopy, and its special fields of usefulness in addition to its accepted value in removal of aspirated foreign bodies? Broadly, it may be stated that bronchoscopy is indicated in any case of pulmonary disease of unexplained origin. It may be of value in determining the exact site of tumors

and strictures of the bronchi, and the degree of bronchial distortion and motility. It provides an excellent method for removal of tissue for microscopic examination and for the collection of bronchial secretions for cytologic and bacteriologic study, and it may permit the relief of bronchial obstruction due to retained secretion which occurs in atelectasis of the newborn and after operation.

The contraindications to bronchoscopy are few. It should be avoided in cases of cerebellar tumors, in which hyperextension of the head might lead to compression of the cord. The patients with a broken neck, severe and advanced cardiac failure or untreated myasthenia gravis, and the patient in extremis are poor candidates for the examination. Bronchoscopy should be avoided during a period of severe pulmonary bleeding because the field of vision is promptly obscured by the blood and very little can be accomplished. On the other hand, much useful information may be obtained if bronchoscopy is performed when bleeding is small in amount, as it may enable the bronchologist to trace the blood to its source and locate a lesion that might otherwise be overlooked. There is some difference of opinion among bronchologists as to the advisability of performing bronchoscopy in the course of an attack of status asthmaticus or in cases of severe acute pulmonary infection. In my opinion, patients who have these pathologic conditions are poor candidates for bronchoscopy, and if this diagnostic procedure is performed, they should be handled with considerable care.

Bronchoscopy is always indicated in any case of chronic, persistent cough. It is a most valuable aid in the study of carcinoma of the lung. Although in the past decade great strides have been made in the field of thoracic surgery, particularly in the surgical treatment of carcinoma of the lung, if continued progress is to be made it is essential that operation should be performed early. Unfortunately, carcinoma of the lung is not limited to men past middle age; it can occur at any period of life, and in women as well as men. It may remain asymptomatic or may produce atypical symptoms and roentgenographic changes that are

* Read at the meeting of the Arkansas Medical Society, Little Rock, Arkansas, April 21, 1952.

not diagnostic of the disease. Consequently, the possible presence of carcinoma of the lung must always be seriously considered in any case of unexplained pulmonary changes.

In most cases, the carcinoma of the lung presents a rather characteristic bronchoscopic appearance, and, if the tumor is present in the larger stem bronchi, satisfactory tissue can be obtained for microscopic diagnosis. Unfortunately, approximately a third of the carcinomas arise in bronchi that are beyond the field of vision, and it is impossible to obtain satisfactory tissue for microscopic examination. In cases of this type, valuable aid may be obtained by aspirating secretion, by taking smears from the bronchus supplying the portion of the lung involved by the lesion, and by irrigating the bronchus and aspirating the material for cytologic examination. In many such cases, a positive diagnosis can be established. It should be mentioned at this point that cytologic examination of sputum will afford similarly good results.

Bronchoscopy is of value not only in the diagnosis of carcinoma of the lung, but also to the surgeon in determining the exact site of the tumor, so that he can better plan the most suitable type of surgical approach.

One of the most interesting tumors of the lung is the alveolar cell tumor, also designated as "adenomatosis of the lung." There is considerable difference of opinion among pathologists as to whether or not this tumor should be classified with carcinomas. It is a comparatively rare tumor which is frequently confused with bronchogenic carcinoma. In contrast to bronchogenic carcinoma, the alveolar cell tumor arises from the alveolar lining and seldom, if ever, metastasizes. Bronchoscopy can be of value in the diagnosis of alveolar cell tumor even though no tumor may be found on direct inspection, as one might anticipate from the site of origin of the tumor. Invariably, one will find a thin, watery secretion coming from the involved bronchus, and cytologic study of this secretion will show the characteristic appearance of alveolar cell tumor. Occasionally, it is possible to obtain tissue from the depths of the bronchus which on microscopic examination will show the presence of the tumor. Cytologic examination of the sputum of the patients likewise will disclose characteristic tumor cells.

Bronchoscopy is the only method by which it is possible to make a positive diagnosis of adenoma of the bronchus or trachea other than by surgical exploration. Owing to the fact that it is covered by normal mucous membrane, an adenoma of the bronchus does not exfoliate the characteristic

cells of the tumor. Consequently, it cannot be recognized by cytologic examination of sputum or bronchial secretions. Although adenoma occurs in a slightly younger age group than carcinoma of the lung, it occurs with equal frequency in women as in men, and has a somewhat longer clinical course. In every other respect it can simulate bronchogenic carcinoma very closely. The differential diagnosis of adenoma and carcinoma of the bronchus usually can be made with ease. Adenoma of the bronchus arises from the bronchial glands and these glands are most prevalent in the larger stem bronchi. In more than 90 per cent of cases, the tumor can be inspected with the bronchoscope, and tissue can be removed for microscopic study.

The differential diagnosis of adenoma of the bronchus and carcinoma of the bronchus is especially important because of the problem of therapy. In the case of an elderly patient with adenoma of the bronchus, when the tumor is attached to the bronchial wall by a narrow pedicle and there is very little evidence of bronchial infection, and especially when it would be necessary to perform pneumonectomy for removal of the adenoma, it is best to remove the lesion by endoscopic means. In most other cases the tumor is best dealt with by surgical operation, which as a rule need not be as radical as for carcinoma.

Tuberculosis, like carcinoma, must always be seriously considered in every case of unexplained pulmonary disease. Tuberculosis is notorious for its ability to travel under many guises and to mimic many diseases. Because of this characteristic of tuberculosis, routine cultures and smears of sputum should be studied in every case of unexplained pulmonary infection. Bronchoscopy can often be of value in the recognition of this disease, not only because it gives an opportunity to observe the gross appearance of tuberculosis lesions involving the tracheobronchial tree, but especially because it is a means for obtaining tissue for microscopic examination and bronchial secretions for study when sputum is not available. Such secretions often obtained from below a strictured bronchus may show the presence of tuberculosis where material collected from above the point of obstruction might fail to do so.

Bronchoscopy is indicated in cases in which examination of the sputum persistently discloses *Mycobacterium tuberculosis* although the roentgenologic findings do not reveal any evidence of tuberculosis. In most cases in which pulmonary resection is to be performed for tuberculosis, bronchoscopy is indicated to determine the pres-

ence or absence of tracheobronchial tuberculosis, stricture, granuloma or complicating bronchial disturbances. It is also of value in determining the site and extent of such lesions if they are present. It may be of value in following the course of a tuberculous bronchial lesion that is undergoing specific treatment.

A most important indication for bronchoscopy is in cases in which there is a history of chronic cough or hemoptysis of unexplained origin. A history of hemoptysis was obtained in 200 (29.8 per cent) of 670 consecutive cases in which bronchoscopy was performed at the Mayo Clinic between January 1 and June 10, 1950, inclusive. The most common cause of the hemoptysis in these cases was a malignant lesion of the tracheobronchial tree, with bronchiectasis being a close second.

Based on the clinical history, the character of the sputum, the presence of clubbing of the fingers, and the results of roentgenologic examination of the thorax, the diagnosis of bronchiectasis can be made with relative ease in most cases. In cases of the dry type of bronchiectasis, especially if hemoptysis is the predominant symptom, the diagnosis may be more difficult. All patients with bronchiectasis, whether bleeding is present or not, should have the benefit of at least one bronchoscopic examination. This precaution is advisable because a foreign body, which may have been aspirated in childhood or later in life and gone unrecognized, may be the etiologic agent responsible for the bronchiectasis. A broncholith, a bronchial tumor, or any lesion that interferes with bronchial drainage may produce a clinical and roentgenologic picture indistinguishable from that of uncomplicated bronchiectasis.

The same precaution should be exercised in cases of chronic lung abscess. When there is doubt as to the cause of the abscess, bronchoscopy should be performed.

Hemoptysis is a not uncommon accompaniment of obstructive pneumonitis with associated bronchiectasis. When obstructive pneumonitis involves the middle lobe, it is frequently designated as the "middle lobe syndrome." When bleeding occurs in a young patient with the middle lobe syndrome, the underlying pathologic lesion frequently is confused with pulmonary tuberculosis, and when it occurs in a patient past forty years of age it is suspected of being carcinomatous in origin. Bronchoscopy can be of value in the diagnosis of middle lobe syndrome, but is especially valuable in determining the possible cause. Although obstructive pneumonitis

of the middle lobe most frequently has an inflammatory basis, it may occur as the result of a broncholith, a benign or malignant tumor, or any lesion that obstructs the middle lobe bronchus. Obstructive pneumonitis with bronchiectasis does not necessarily have to be limited to the middle lobe; it may occur elsewhere in the lung.

Bronchoscopy is useful in the diagnosis of many other pulmonary lesions that may produce bleeding. In 16 (8 per cent) of the 200 cases, no adequate cause can be found for the bleeding. It is my impression that if the results of roentgenographic examination of the thorax, cytologic examination of the sputum for malignant cells, culture of the sputum for *Mycobacterium tuberculosis*, bronchoscopy, and bronchography are normal in cases of hemoptysis the prospect of development of subsequent serious pulmonary difficulty is very remote.

Bronchoscopy is always indicated in any case of stridor or wheezing of unexplained origin. Tracheal and bronchial tumors and strictures may cause marked respiratory embarrassment without producing any roentgenographic changes, and the condition may be detected only by bronchoscopy. Similar symptoms may be produced by compression of the trachea or bronchus by tumors or vascular lesions or anomalies.

A most interesting and valuable use for bronchoscopy is in cases in which chronic bronchitis or asthma produce attacks of chills and fever. Most frequently, the attacks of fever will last from three to five days, and the patient will be relieved by coughing up a small amount of purulent material. Physical examination may disclose an area of decreased breath sounds, especially under the angle of the scapula. On bronchoscopic examination, one may find narrowing of a bronchus, and dilatation of the bronchus may liberate a small amount of retained secretion. After bronchoscopy, marked improvement often will occur in the respiratory symptoms and the attacks of fever will disappear. The bronchi that are most frequently involved in this process are the superior divisions of the lower lobe bronchi.

Bronchoscopy is of great value in the treatment of postoperative atelectasis, especially in cases in which the atelectasis is due to aspiration of regurgitated material into the lung. It is also of value in the nonoperative atelectasis due to obstruction of the bronchial lumen with thick, tenacious, mucoid secretion. Although it is of value in the newborn with atelectasis of a high grade, it will be found that most newborn infants will completely aerate their lungs in a comparatively short period of time on their own accord.

In cases of carcinoma of the upper half of the esophagus in which an esophageal operation is considered, bronchoscopy should be performed preoperatively to be certain that the carcinoma has not broken through the membrane between the esophagus and the trachea. If such an invasion had occurred, operation is not indicated. Esophagotracheal and esophagobronchial fistulas in the adult patient or in the newborn infant often require bronchoscopic investigation.

With the introduction of the mass chest survey, the discovery of many circumscribed asymptomatic coin lesions raises the question of the advisability of routine bronchoscopy in all such cases. It must be stated that, more often than not, bronchoscopy will prove of very little value. However, if the lesion is situated where it might be reached endoscopically, it is advisable that bronchoscopy be performed, for it is generally not possible from the roentgenographic appearance alone to establish with certainty the true nature of the lesion. If it is possible to accomplish this endoscopically, the diagnostic procedure may be valuable to the surgeon in determining the most suitable surgical approach. In any event, surgical exploration should be advised in any case of circumscribed, asymptomatic pulmonary coin lesion which does not contain calcium, if the patient's age and general condition permit, and if the lesion has not been known to be of many years' standing, because close to 40 per cent of such lesions will be found to be of carcinomatous origin.

Bronchography

There are two contrast media that are most frequently employed at the present time in the study of the bronchial tree. The medium used most commonly is iodized oil. More recently, a water soluble substance such as umbradil the diethanolamino salt of 3,5 diiodo-4(1H)-pyridone-1-acetic acid) has been used with increasing frequency. The advantage of a water soluble substance rests in the fact that it rapidly disappears from the tracheobronchial tree and consequently will not obstruct the pulmonary field for subsequent radiological study. The disadvantage of the water soluble substance is that it is somewhat more irritating to the patient on its administration than is iodized oil, and its viscosity is more difficult to control than that of iodized oil. Iodized oil, although less changeable as far as viscosity is concerned, and although less irritating to the patient, has the distinct disadvantage that

it remains in the lung for a considerable time and thus obscures the pulmonary field for subsequent radiologic examination.

There are many methods by which the contrast medium can be instilled into the bronchial tree. In adults, we have obtained very satisfactory results by injecting the contrast medium into the bronchial tree through a catheter. With the use of a catheter it is possible to fill both sides of the lung at one sitting. In the case of children, bronchography presents a much more difficult problem, and in cases in which the patients are very young children we have found that the most satisfactory results are obtained by injecting the solution into the lung with the child under a general anesthetic. We have found that ether anesthesia has many advantages over other types of anesthesia. We also have found that if the contrast medium is injected through a bronchoscope, the material can be aspirated from the bronchial tree at the completion of the roentgenographic examination.

In most cases, satisfactory visualization of the tracheobronchial tree can be obtained by first filling the right lung and then tipping the patient in various positions. Roentgenograms are made with the patient in the anteroposterior position. Lateral and oblique roentgenograms also are made. The left lung is then filled in the same manner, and anteroposterior and oblique roentgenograms are made. These five roentgenograms will offer complete and satisfactory information in most cases.

Probably the greatest value of bronchography is in the study of bronchiectasis. It is the only means by which it is possible to determine the exact site of involvement in cases of bronchiectasis. This is very essential in cases in which operation is to be performed.

In a case in which a patient recently has recovered from nonspecific pneumonitis, a bronchogram must be interpreted with caution. In a case of this type, the bronchographic findings may be characteristic of bronchiectasis owing to shortening of the bronchial tree which occurs in this type of pneumonia. This disappears after the pneumonic process has subsided completely.

Bronchography also may be of value in the diagnosis of other pathologic conditions such as pulmonary abscess, bronchial obstruction, fistulas between the esophagus and respiratory tract, and bronchial abnormalities.

SURGICAL MANAGEMENT OF THE PROSTATIC PATIENT*

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In discussing this problem in the time allotted it is best to emphasize a few points rather than attempt to cover broadly the entire field of prostatic surgery. The two points I wish to emphasize are (1) when to consider surgical management of the patient with prostatic obstruction and (2) what type of surgical management is safest for that patient.

In the not so far distant past prostatic surgery was considered most hazardous. Operative mortality of 15% to 20% was not uncommon. Morbidity was such that most elderly men felt that to go to the hospital for a prostatic operation was to expose themselves to much pain, a constant uriferous odor from a draining suprapubic sinus and a long hospital stay. It was the final step in an unfortunate chain of events. They lived in a constant dread of acute urinary retention and to suggest an operative procedure prior to this dread event was not to be considered.

It is difficult to understand how it was possible for several thousand years to lapse without even a partial successful solution to this problem and then in one generation almost a complete solution to the problem has been accomplished.

To return to the first point, when should surgical management be considered? The answer to his question must be based on symptomatology and not retention of urine. It must be based on symptomatology and not on the age of the individual. It must be based on symptomatology and not on the size of the prostate rectally.

We are all familiar with the symptoms of prostatic obstruction. First there is usually frequency and urgency of urination. Questioning at this time usually elicits the answer that the patient is having no trouble voiding, he is having trouble keeping from voiding. Later he has nocturia, weakness of the urinary stream, hesitancy, and dribbling of urine. These symptoms appear so gradually that usually no particular notice is paid to them and again most elderly men feel that symptoms such as these are a natural ageing process. The fact that the majority of older men have these symptoms has brought about this philosophy.

What is the significance of residual urine? Simply that the bladder has decompensated and

can no longer overcome the obstruction at the vesical outlet. Residual urine is to bladder function what peripheral and pulmonary edema is to cardiac disease. To use residual urine as an indication for prostatic surgery is to wait until much damage has been done that could have been avoided. What is the significance of age? As men grow older generally a higher instance of prostatic obstruction occurs. This however, does not by any means exclude the men in the thirties or forties. I have seen patients in their thirties with diverticula of the bladder and even hydronephrosis of the renal pelvis from prostatic obstruction. In any large series of cases approximately 10% of the patients having prostatic obstruction are below the age of 50. Bladder neck obstruction can and does occur at any age and one must not let the thought that the patient isn't old enough obscure this diagnosis.

Just as younger groups have prostatic obstruction so age in the older groups is not a contra indication to modern urological surgery. It is one of the advantages of transurethral surgery that the age limitation has been extended to include almost any age.

What is the significance of the size of the prostatic rectally as to whether or not obstruction to the vesical outlet is present? The answer is none. The size of the prostate rectally only indicates the amount of growth of the prostate in that direction. It is an inaccurate method of determining the size of the prostate except in generalities. Just as a garden hose may be shut off without changing the outside diameter of the nozzle so may obstruction occur with the prostate feeling smaller and actually being smaller than the normal prostate rectally.

So if residual urine, age of patient, and size of prostate rectally are of no value in determining when to offer surgical management we again come back to symptomatology. In addition there is one cystoscopic finding that is present in nearly 100% of obstructive bladder outlets and that is trabeculation of the bladder. If trabeculation of the bladder is present it is definite evidence of obstruction even though the obstruction may not be apparent cystoscopically.

What is to be gained or lost by waiting and watching these patients with prostatic obstruction. The end result of prostatic obstruction, trabeculation of the bladder, cellule formation, diverticulae of the bladder and dilatation of the upper urinary tract will too often occur. Large stones may form in the diverticulae and tumors may also occur

* Read before the Seventy-sixth Annual Session, Arkansas Medical Society, Little Rock, April 23, 1952.

there. Acute retention of urine may occur and chronic renal failure, with azotemia and its deleterious effects of the other systems of the body usually does occur. In other words we can only wait for the condition to grow worse, it can get no better with any present day medical therapy. Acute retention of the urine adds appreciably to the pain, the mortality and morbidity associated with prostatic surgery. The secondary effects of the azotemia such as loss of appetite, loss of strength, anemia and general debility are well known. Frequently however the fact that the cause of the symptoms in the old age groups, both male and female, is prostatic obstruction is overlooked. They may so minimize their obstructive symptoms that one does not realize that the urinary retention is their primary disease. In general one may state that once prostatic obstruction occurs, it remains until surgically treated, and the indications must be based on symptomatology, trabeculation of the bladder and general conditions of the patient. I do not advocate surgical management for minimal symptoms but I do advocate that the decision as to whether or not surgery is indicated must be based on symptoms and not on whether or not the patient has residual urine, whether or not the patient is aged or has a large prostate rectally. In a few cases of silent prostatic obstruction large degrees of residual urine and damage to the upper urinary tract may be present with few or not symptoms of obstruction. Dick¹ of the Lahey Clinic has recently called attention to this group of cases. These constitute a difficult problem but must have surgical relief.

The second point I wish to discuss is the selection of the best and safest surgical approach for the patient with prostatic obstruction. One might say that this is the responsibility of the surgeon who is operating upon the patient. While this is true it is also the responsibility and the right of the general practitioner, who after all is the doctor the patient primarily looks to for advice, to familiarize himself with what different surgical approaches to the prostate offer the patient in the way of results, mortality and morbidity.

There are four principal surgical approaches to the prostate, the traditional supra-pubic prostatectomy, the retropubic prostatectomy, perineal prostatectomy, and transurethral prostatectomy. It is my feeling that transurethral prostatectomy is the treatment of choice in at least 90% of the patients with obstruction from prostatic enlargements. I believe that an unbiased consideration of available statistics and facts relating to the problem will bear out that contention.

Let us look at the problem from the aspects of the questions which are so often brought up. (1) "The size of the gland." Much has been written and said to the effect that it was fine to do a transurethral prostatectomy on the small prostate gland but the larger glands should be removed by open surgical procedures. It should be pointed out that less than 7% of the prostate glands are larger than 100 grams. It is also very difficult to judge the size of the prostate gland rectally. We are all familiar with the fact that at times a gland is felt to be very large and approached through an open surgical approach only to find a gland weighing 40 to 50 grams. A point of consideration in this respect is that size is no contra indication to the average good resectionist. The large intravesical prostatic lobes which obtain great size are often easier to resect than are the medium size intraurethral prostatic enlargements. The average good transurethral prostatectomist can remove a 100 gram of tissue within one hour operating time and this will take care of at least 93% of prostatic enlargements. By use of perineal urethrotomy, transurethral resection of the large prostate becomes much easier and can be more rapidly performed. When the question of mortality is also considered it may actually be safer to have two transurethral resections than one open surgical approach to the prostate.

Question No. (2). The prevention of carcinoma of the prostate. It has been mentioned that the whole gland should be removed so as to prevent the future development of carcinoma of the prostate. Hypertrophy of the prostate begins in the periurethral glands as adenomatous enlargement and compressing the normal prostatic tissue into the surgical capsule. Surgeons and pathologists are familiar with the surgical capsule of the prostate and understand that the line of cleavage that is developed in open surgical approaches to the prostate is between the adenoma and the surgical capsule which contains normal prostatic tissue. Therefore it is obvious that in suprapubic, retropubic and simple perineal prostatectomy prostatic tissue remains. Only one operative procedure is designed to remove all the prostatic tissue and this is total perineal prostatectomy. In answer to this question, Emmett² of the Mayo Clinic has published an interesting series of patients. He observed 102 patients who had previous open prostatectomy and who later came to transurethral prostatectomy. Of these 66 were benign while 36 of these glands were malignant. Of the 66 glands which were benign, obstruction was caused in 23 instances by scar tissue in the pos-

terior urethra. In 43 of these cases there was adenofibromatous hyperplasia of remaining prostatic tissue. The group of 36 malignant cases were further studied and in this group 16 had a lapse of over 10 years since previous open prostatectomy. Obviously in this group carcinoma developed in the prostatic tissue which remained after so called complete enucleation of the prostate. In seven instances the open prostatectomy had been performed less than one year previously. In this group the carcinoma of the prostate was obviously overlooked in the removal of the adenomatous enlargement. That open surgical procedures should be done to remove all the gland so that carcinoma will not develop in the future is a fallacy unless one speaks of total perineal prostatectomy.

The third question is that of multiple resections in a patient having transurethral prostatectomy. I will admit that in any large series of transurethral prostatectomy 3% to 4% may have to have a resection at a later date. It should not be forgotten however that in some instances patients having open surgical approaches to the prostate later must have transurethral prostatectomy. The series of 102 patients reported by Emmett gives evidence to this statement. Whether or not one is going to have a high incidence of re-resection in transurethral prostatectomy depends upon the completeness of the resection at the initial operation. Transurethral prostatectomy is no longer a hold boring operation. The capsule is exposed in all directions and it is the intention of the resectionist to remove all the adenomatous prostatic tissue. Nearly all poor results are due to residual tissue and one must be honest with one's self and not hesitate to re-resect a patient who is having poor results, after any type of prostatectomy.

In no other field of surgical endeavor is good training so essential as in the development of the transurethral surgeon. The efficiency of this operation must be judged by the results of well trained technicians and not those who hearing of the short convalescence and excellent results decide to take up the operation. The disappointment of such individuals with the procedure will be exceeded only by the suffering and mortality which follows in their wake. It is important that the patient who has a transurethral prostatectomy or the patient who has any type of prostatectomy be able to empty his bladder upon dismissal. The myth of the atonic bladder has been well exposed. There is no substitute for completeness of the prostatectomy and the use of drugs stimulating

the musculature to overcome the obstruction, which is remaining, is to be condemned.

Question No. (4). The mortality associated with prostatectomy. The statement is often made today that with all our modern advances in techniques and antibiotics that open prostatic surgery is as safe as transurethral surgery. Creevy,³ in order to ascertain the facts, reviewed the literature for the years 1945-1949 inclusive to see what the overall reported mortality was. He found that the mortality of open enucleation was 5.3% as against a mortality of 1.29% for transurethral prostatectomy. The statement that today open prostatectomy is as safe for the patient as transurethral prostatectomy is not substantiated. The patient having open prostatectomy at the present time has approximately 3 to 4 times the chance to expire from the operation as the patient that has transurethral prostatectomy.

SUMMARY

In recapitulation the points that I have considered worthy of stress are (1) that the indication for prostatectomy must be based on symptomatology and not on the age of the patient, the amount of residual urine, not the size of the prostate on rectal examination. (2) There is no known medical therapy which will cause the process to regress and once vesical neck obstruction occurs it remains until surgically removed. (3) The dangers in conservative observation of these patients with prostatic obstruction are that the process will progress, that there will be damage to the urinary tract, chronic renal failure will occur, and that secondary anemias are frequently present. One only puts off a procedure until a later date when a patient is most likely in a poorer general condition. (4) There are suprapubic, retropubic, perineal, and transurethral approaches to the prostate and while there are indications for all these approaches, I believe that in the majority of instances transurethral prostatectomy is the procedure of choice. The substantiating arguments for this are that the operation can be applied to at least 93% of all glands from the standpoint of size, the belief that the open surgical approach removes the prostate entirely and that there is no future danger of carcinoma is erroneous, that the operation has a minimum percentage of cases requiring a secondary transurethral prostatectomy, and that mortality of transurethral prostatectomy is appreciably lower than that obtained with open surgical approach to the prostate.

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PUBLIC RELATIONS

Physician
Patient
Personal

AMA Secretary George F. Lull's Letter dated December 10th carries an excellent account of the doings of the AMA's sixth annual clinical session held in Denver. BUT, in addition to this report almost three-fourth's of a page is devoted to a news item under the following heading:

Arkansas Holds First PR Institute. Dr. Lull's letter goes on to say—"The 77-year-old Arkansas Medical Society held its first Public Relations Institute at Little Rock, November 20, and the affair exceeded all expectations." The Chicago Letter reports in another paragraph: "State President S. A. Drennen said in his address of welcome that 'the unexpected large attendance was a good and healthy sign, and proved definitely that public relations must be given a top priority rating in the society's plans for the future.' Up to this time the society has had no public relations budget."

The above quote from the Secretary's Letter will be read by physicians all over the nation. Despite the fact that the letter calls attention to our lack of a P. R. budget they know we are at least making progress. Good Medical Public Relations are still being reported from Drew County sparked by a member of our State P. R. Committee, Dewis Hyatt. The Drew County Medical Society recently sponsored the movie short, YOUR DOCTOR, and had as their guests 45 members of the Arkansas A. & M. College Pre-Med Club. (All college towns please take a broad hint!)

Your community should see this film! If you would like your patients, friends, and neighbors to know what makes an M. D., how he practices with complete devotion to duty, how his education is continued through his county society, then write to Public Relations, c/o Arkansas Medical Society, and you will be told how to arrange for the new RKO radio-movie short to be shown in a theater in your county.

IT'S TRUE!—The best public relations begin in your office—but they don't end there!

CORRESPONDENCE

Dear Doctor:

The Pulaski County Medical Society cordially invites you to attend their Scientific Programs throughout this year. On many of these programs

will be subjects of great interest to physicians throughout the state, and the Pulaski County Medical Society hopes that you will come as their guest to any or all of their meetings.

The programs for the first third of this year are as follows:

Jan. 5—Dr. Robert P. Glover of Philadelphia, "Cardiac Surgery."

Feb. 2—Dr. Edwin C. Hamblen of Duke University, "Diseases of the Endocrine Glands."

Mar. 2—Dr. Hayden C. Nicholson, Dean University of Arkansas School of Medicine, "Progress & Problems of the University of Arkansas School of Medicine."

Apr. 6—Dr. Leon Schiff of Cincinnati, "Jaundice."

You are cordially invited to come and hear these interesting speakers.

Raymond C. Cook, M.D.
President, Pulaski County
Medical Society
Alfred Kahn, Jr., M.D.
Chairman, Program Committee
Pulaski County Medical Society.

December 30, 1952

Dear Mr. Schaefer:

The following five paragraphs are copied from an Information Bulletin issued by the National Advisory Committee to the Selective Service System. It is my suggestion that they be published in the next issue of the Journal of the Arkansas Medical Society. This request is made in order that physicians of the State may be acquainted with the overall policies in regard to physicians in Priority III under Public Law 779.

I would like to suggest that all County Medical Societies review the status of physician members who are in Priority III. They then should determine through their local committee what men in this Priority grouping can be spared for military service without interfering with the health demands of the local area. Those who are considered available should then be reported to the local Selective Service board in order that the Selective Service classification might be changed to fit their status. The local board will then take the necessary steps to see that these individuals are reported to the Army for examination to determine their physical fitness for service. After the examination is completed, the physician can be properly classified either as IV-F (physically disqualified), or in the other classification which fits his case, which would probably be I-A.

"Several state chairmen have inquired about the classification of Priority III. In many instances the Priority III registrants have been classified I-A since no advice was submitted to support any other classification. The great number of them and the short period of time before classification as well as lack of information on the group all contributed to this situation. In addition, many Priority III's classified I-A have been called up for physical examinations, regardless of their ages.

"Priority III's are to be ordered for induction by age BUT the calls must be made on those in I-A who are **'examined and acceptable.'** Therefore, it is highly desirable that a pool be developed of the younger groups so that there will be a sufficient number of them in I-A **'examined and acceptable'** to meet calls in the near future. Otherwise older registrants might be ordered for induction simply because there are not enough younger ones who have been classified as I-A **'examined and acceptable.'**

"For this reason the advisory committees should concentrate on advising local boards as to the essentiality or availability of those in the lower age brackets, first. This does not relieve the committees of advising local boards on the essentiality or availability of older Priority III's.

"The essentiality or availability of any individual changes from time to time dependent in part upon the entry into (and the return from) the armed services, of other individuals associated with them in a community, a hospital or a professional school. If any older Priority III's are classified I-A (and especially if they have been designated as I-A, 'examined and acceptable') and are now (or will in the future be) considered essential, their local boards should be so advised so that their cases may be reopened and considered anew in the light of the situation as it exists at that time.

"The necessity of assisting in every way in building up a pool of younger Priority III's so that they can be called by age (rather than by age only from amongst those who happen to be classified as **'examined and acceptable'**) is essential to the smooth operation of the program operating under Public Law 779."

Your State Medical Advisory Committee has had many problems to contemplate during the past several months. Unless the military situation changes, our problems will become more intense with the passing months. Some physicians must be called to active duty. In every instance the status of these physicians has been determined by members of the Advisory Committee to the best

of their knowledge, and the recommendations forwarded by them to the higher echelons carry the conviction of the Committee that a fair decision has been made.

The cooperation of physicians throughout Arkansas is requested in assisting members of the Committee at any time they can in making an equitable decision concerning the call to active duty of doctors from civilian life.

Sincerely yours,

Gerald H. Teasley, M.D.,

Chairman,

State Advisory Committee.

December 26, 1952.

Dr. J. J. Monfort, Secretary,
Arkansas Medical Society,
Batesville, Arkansas.

Dear Doctor Monfort:

During the Clinical Session of the Association in Denver, the attention of the Board of Trustees was called to the fact that, in some areas, it is customary for physicians to watch for statements unfavorable to medicine in, say, editorials and speeches. As soon as one of the physicians learns of the remarks, he seeks the person responsible and attempts to impart truthful information. This action has, in some instances, resulted in public retraction of the statements.

The Board of Trustees approved of this idea in principle and believes that it can be implemented with success on the local level. In accordance with its request, therefore, I am forwarding the proposal to you for whatever action your society may wish to take.

Sincerely yours,

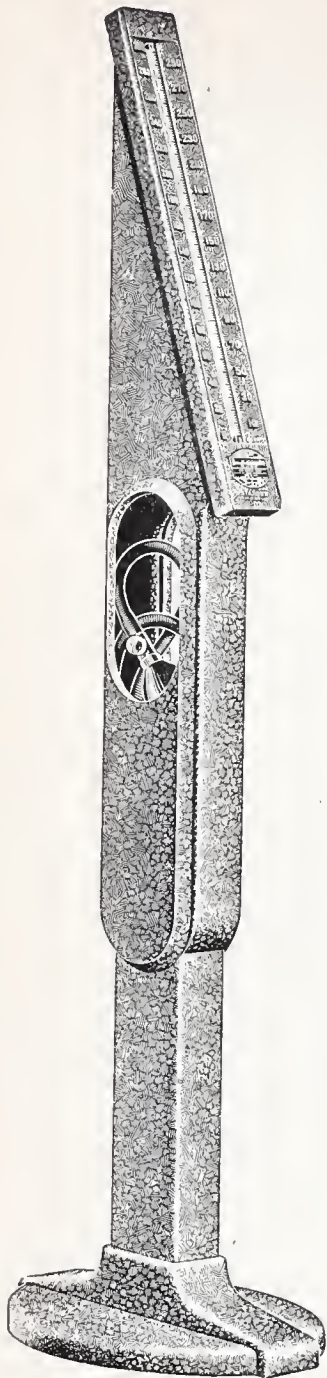
George F. Lull.

RESOLUTION

WHEREAS, an all-wise providence has seen fit to remove from our midst, Dr. William Vernon Newman, who was our valued co-worker and a faithful member of the Pulaski County Medical Society, Arkansas Medical Society and the American Medical Association, since 1935, we the members of the society mourn and deeply regret his departure.

WHEREAS, as a physician in his chosen field of Orthopedics, he attained a great measure of distinction and won the respect of his colleagues,

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Now equipped with the new AIR-LOK Cuff \$42.50
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as well as, the gratitude and love of a host of sorrowing people.

THEREFORE, BE IT RESOLVED, that the Pulaski County Medical Society express to his family the esteem in which he was held as a member of the Society and its heartfelt sympathy to the family at the untimely loss that they have sustained.

BE IT FURTHER RESOLVED, That a copy of this resolution be made a matter of record in the minutes of this meeting; that a copy be sent to the family and a copy to the Journal of the Arkansas Medical Society.

This resolution is respectfully submitted to the members of the Pulaski County Medical Society by your committee:

Clyde Rodgers, M. D.

Charles Wallis, M. D.

Ewell Thompson, M. D.

LATEST ADVANCES

In 5 Important Fields

The Date: April 22, 1953

WHAT'S NEW & WHAT'S TRUE

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EDITORIAL

PHYSICIANS AND SELECTIVE SERVICE

Members are invited to read a communication from Gerald H. Teasley, M. D., Chairman, State Advisory Committee to Selective Service on the subject of physicians in Priority III under Public Law 779. Certain provisions of Selective Service as concern physicians appear to be misunderstood. It should be remembered that all physicians up to and including the age of fifty are eligible for service under the so-called "doctor draft" law. Certain registrants, i. e., those born after August 22, 1930, and who are, in addition, physicians, dentists, or veterinarians, registered as special registrants under Public Law 779 may be said to be "doubly liable" for military service. Most of the younger professional men are in this group. Those who are classified as I-A by their local boards may appeal such a classification within ten days by a letter mailed to their boards, such letter stating that "I hereby appeal my classification" and stating reasons set forth for the appeal.

The criterion for essentiality is that the physician must have been in the community four years in full time practice, in a community with limited medical facilities, and that the entry of the physician into military service would make the health standards of the community fall below minimum requirements. In the evaluation of such essentiality, the total population of the community concerned, the surrounding community, hospital facilities and the number of other physicians within reasonable travel distance, must be considered. A physician declared not available for military service because of essential reasons must try to secure a replacement for himself.

A physician ordered for induction as a special registrant may apply for and accept a commission in order that he may not be inducted as an enlisted man. A minimum time of from three weeks to three months may be required for the complete processing of such an application. Upon receipt and acceptance of such a commission the special registrant will not report for induction. When ordered to report as a regular registrant, however, the physician will be inducted unless he accepts the commission and actually enters on active duty by the date set for induction.

THE MAGNUSON COMMISSION PROPOSES

U. S. Subsidies for Prepaid Plans Aid to Medical Education Expansion of Group Practice

Department of Health and Security Expansion of Hospital Program Billion More Yearly for Health

The report of the President's Commission on the Health Needs of the Nation recommends that the federal government take the lead in bringing about a series of momentous changes that would affect virtually every phase of medical activity. The cost would be about \$1 billion more annually, which the Commission says the country cannot afford not to spend.

The Commission, under chairmanship of Dr. Paul Magnuson, has been surveying medical problems for the last year. It was appointed by President Truman and expires on December 29. President Eisenhower up to now has not indicated his attitude toward the Commission.

Made public today was the first volume, containing all recommendations. The remaining four volumes, devoted to details and statistics, are not yet ready for release. Following are more important findings and recommendations:

Creation of a Cabinet-Rank Department of Health and Security.

The Commission decided that the interrelationship between federal health functions and general security functions "... is so fundamental that it indicated the desirability of combining" them. (Commissioners Evarts A. Graham and Russel V. Lee dissented, urging instead a cabinet Department of Health. Commissioner Joseph C. Hinsey advised more study.)

Also at the top level would be a permanent Federal Health Commission, similar to the Magnuson Commission, whose duty it would be to observe and report annually on all national health matters. It would contain no U. S. or state employees and not more than half of its members could be professional persons.

The tentative budget sets aside \$1 million to finance the Commission and federal programs for industrial health and migrant workers, but does not give a breakdown of costs for the three operations.

U. S. Would Subsidize Prepayment Plans, Operating Through State Agencies.

The Commission accepts the present prepay-

ment plans as the most feasible vehicle for eventually bringing comprehensive medical protection to almost everyone. The report reviews other suggestions in this area (Ives, Hill bills, etc.), then makes a new proposal. The administrative mechanism would be a federal-state program under which a single state health authority would draw up an overall state plan for using all available services and facilities, operating through local or regional health service authorities. The local prepayment plan would be the basic financing unit.

Each state's share of the federal funds—to be matched by the states—would depend on the state's income, with the poorest states receiving the largest per capita grants. An annual federal appropriation of \$750 million is proposed for this particular purpose. Federal funds, administered by a unit of new Department of Health, would flow to the states, thence to the local level, and be used (a) to pay premiums for welfare cases, (b) to promote and extend prepayment coverage to the general public, subsidizing low-income groups where necessary, and (c) to operate facilities for long-range illness, available to all without a means test. To further encourage prepayment plans to extend coverage and liberalize benefits, the ban would be lifted on payroll deductions from U. S. employees, and OASI funds would be used to pay premiums for OASI beneficiaries. Eventually, care of veterans, merchant seamen and other federal charges would be absorbed by the state and local systems.

Group Practice, More Attention to G.P.'S, Aid to Local Public Health Units.

On medical service organization, the Commission expresses its findings as follows: "The genius for organization, so characteristic of American life in general, is conspicuous in health services by its absence . . . the lack of organization that prevails in medical practice is the despair of the industrialist and the labor leader." The report recommends:

For General Physicians—Their education, training and economic status should be studied and redefined; ways must be found to extend hospital affiliation to them or both doctor and patient will suffer.

For Specialists—Much greater emphasis on group practice. The report states: "We believe fundamentally that group practice offers a desirable method of providing medical services,

properly organized and administered, so as to avoid the exploitation of one physician by another or by controlling hierarchy, and geared toward practicing the highest quality of medicine."

Coordination—Regional grouping of health services is suggested for sparse areas, with maximum cooperative use made of all available personnel and facilities. Federal loans are proposed to local organizations for establishing prepayment plans in which group practice would be utilized. A federal expenditure of \$10 million annually is suggested to cover costs of these two activities.

Public Health—Federal grants totaling \$60 million annually are proposed to help in establishing, maintaining and expanding the operations of local public health departments; present categorical federal grants would be increased and new ones authorized as problems arise.

Hospital's Function as Health and Rehabilitation Centers for Community.

The Commission advises extension of the Hill-Burton hospital construction program beyond its 1955 expiration date; also, annual appropriation to HB of \$150 million, in contrast to current \$75 million. In the HB program, more attention should be paid to construction of health centers and special facilities for mental, chronic and tuberculosis care and for rehabilitation and research projects.

Establishment of medical centers in hospitals is strongly advocated. The report says: "The hospital of tomorrow should be a well-rounded health center from which preventive, diagnostic treatment, rehabilitation and home care services radiate to the entire community. It should be the center of the physician's professional life, providing laboratory and X-ray facilities for his use. . . . In the interests of preserving and increasing our national health we can and should be satisfied with nothing less."

Facilities described above, plus group practice clinics, would form a nation-wide network, largely sustained by prepayment insurance underwritten by the U. S.

Federal Support of Medical Schools Recommended to Increase Physician Supply.

The report is uncompromising on personnel shortages. It concludes: "There are not enough general physicians . . . pediatricians . . . faculty members . . . specialists of all types with possible

exception of surgeons . . . mental and tuberculosis hospitals are critically short of staff . . . growth of prepayment plans and extension of preventive medicine will increase the demand for physicians. . . . No matter what is done, we expect continuing shortages in the next few years."

The Commission proposes \$100 million annually in federal grants to medical and allied schools almost without restriction as to purpose. Money could be used to meet deficits, to purchase equipment, for modernization, for maintenance and for improving curricula. However, there would be these restraints on the federal government: "There must be no federal control over the curriculum or administration of any school, or the admission of applicants, except as may be necessary to maintain minimum standards."

No attempt is made to hold states and local communities responsible for maintaining medical schools, nor are these non-federal sources called upon to increase their contributions in view of the medical schools' fiscal difficulties. There is this statement: ". . . any federal grants should supplement, not replace, state appropriations and private gifts, and should not exceed a designated percentage of a school's total operating budget." Federal scholarships also would be made available to qualified needy students."

Care of Military Dependents Questioned; Congress Asked to Rule on VA Problems.

The Commission recognized the complaints of the medical profession against drafting of physicians to care for dependents of military personnel; the report suggests that if Congress decides such care is a military responsibility, it might be furnished through prepaid health policies. Congress is also urged to establish a clear-cut policy on the medical care of veterans by Veterans Administration. In its absence, the Commissioners decline to make any firm recommendations regarding the government's responsibility to care for veterans whose illnesses and injuries are not service-connected.

Additional Recommendations: \$20 million more is proposed for federal research and research grants programs. Development of improved methods of measuring morbidity at the federal level is recommended. Also discussed are problems in virtually every medical field, with recommendations made in most instances.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

CLINICAL EVALUATION OF A REHABILITATION PROGRAM FOR THE TUBERCULOUS

By DAVID LEIBOVICI, M. D.

Medical Annals of the District of Columbia, May, 1952

In 1943 the former tuberculosis sanatorium of the District of Columbia was reopened as a rehabilitation center for tuberculous patients. The center was intended to serve two important purposes: It would alleviate a serious bed shortage for the treatment of tuberculosis; and it would bridge the gap between the sanatorium treatment of the patient and his return to normal activity in the community. The purpose of the study reported here was to determine whether or not the rehabilitation program reduced the number of relapses and readmissions.

It might be well first to briefly summarize the hospital program. The hospital is a 125-bed institution under the administrative supervision of the Municipal Hospital. Patients are admitted from both the Health Department hospitals. Requirements for admission are residence in the District of Columbia, negative sputa and gastric washings, stable X-ray findings, and the ability to handle such self-care activities as dressing and attending meals in the dining room. Treatment, such as pneumothorax, pneumoperitoneum and thoracenteses, is continued. X-ray films of the chest are taken at two-month intervals. Consultation service is available through the clinic at the Municipal Hospital.

Occupational therapy is prescribed for all patients and all patients are also seen by the vocational counselor. Regular staff conferences are held. These are attended by the physician, nurses, occupational therapists, vocational counselor, and medical social worker. At conference the plan for the patient's rehabilitation is reviewed, any modification of program is decided, and finally, discharge is considered when all members agree that existing problems have been met as fully as possible.

The ideal criteria for discharge are: (1) Disease inactive, with laboratory examinations negative and X-ray appearance stable; (2) Complications, if present, either not serious or successfully treat-

ed; (3) Work capacity demonstrated and adequate for future plans; (4) If gainful employment is necessary and patient is not yet working, prospects for employment fair; and (5) Social and home conditions are satisfactory.

The follow-up study was done to evaluate this program of rehabilitation. It was based on the replies to yearly follow-up letters sent to former patients, the checking of admissions to other hospitals in the District, and interviews with former patients. All information received was checked against the files of the Tuberculosis Bureau's Central Registry.

The study was limited to patients discharged from the opening of the hospital in 1943 through December 31, 1949. The status was determined as of June 30, 1951, so that the post-discharge period ranged from a minimum of 18 months to a maximum of over eight years. The follow-up was limited to those patients who were at the center more than one month and who were discharged with inactive disease. This group of 716 patients was divided into sub-groups, according to type of discharge. In the follow-up investigation, information was obtained for 641 patients. The clinical status of 75 patients remained unknown and this group was excluded from the statistical analysis.

The analysis, then, is based upon a group of 641 discharged patients whose clinical status was known. There were 505 patients discharged with advice, of whom it was found that: 366, or 72.5 per cent, were alive and well; 80, or 15.8 per cent, were rehospitalized after their discharge from the center; 37, or 7.3 per cent, were dead of tuberculosis; 22, or 4.4 per cent were dead of other causes.

The two groups of "walk-outs" and "disciplinary discharges" have a similar rate of relapse and death from tuberculosis, and for the purpose of study were combined into a single group of 136 discharges against advice, of whom: 60, or 44.0 per cent were alive and well; 48, or 35.0 per cent were rehospitalized; 20, or 15.0 per cent

were dead of tuberculosis; 8, or 6.0 per cent were dead of other causes.

Thus, of patients discharged with medical advice, 72.5 per cent were alive and well and had never been rehospitalized; whereas, of patients discharged against medical advice, only 44 per cent were alive and well. Before concluding that the completion of rehabilitation was probably significant in the small number of relapses found in the first group, it was necessary to determine that the two groups were comparable in other respects.

Detailed comparison of the two groups showed that they were comparable with regard to age, marital status, diagnosis, treatment, onset of illness, length of hospitalization prior to transfer here, number of previous admissions to the sanatorium, and education. These factors then could not explain the difference between the two groups. Furthermore, race and sex, length of stay at this hospital, clinical condition at discharge, and alcoholic history, did not explain the differences between them.

A correct evaluation of a rehabilitation program necessitates the comparison of two groups of patients, equal in all respects except that one group shall have had rehabilitation and the other shall have been discharged without rehabilitation. Moreover, both groups should have been discharged during the same period of time. To meet such criteria in the present instance was impossible. It was necessary to compare a group discharged medically with a group discharged against advice. The patients admitted to the center are selected in one respect. They are the more cooperative patients as the non-cooperative patients either walk out or are discharged before they are ready for transfer to this hospital. The patients discharged against advice from the center had accepted the purely medical and surgical treatment of the disease but refused the rehabilitation necessary to maintain the benefits of treatment.

The patients discharged with advice had completed the activity program at the hospital; had demonstrated adequate physical capacity for their future plans; and, had vocational guidance and selective placement in employment. The patients discharged against advice had left the hospital before their physical capacity was fully developed, and before vocational plans were completed.

The aim of rehabilitation of tuberculous is to bridge the gap between the sanatorium and the community and to effect the gradual transfer of the patient from the sanatorium to the home. When we succeed in "controlling" a patient's disease we must understand that this is occurring in

a "controlled" environment. After the patient leaves the hospital, economic and social factors appear which were not evident during active treatment. In the present study it was found that patients who completed rehabilitation, and who were discharged when judged ready for return, did much better than those who did not complete their rehabilitation. Rehabilitation is a definite part of the treatment of tuberculosis and is of benefit to the community in reducing costly readmissions to the hospital, loss of earning power, and expenditure of public funds.

OBITUARY

CHARLES W. RASCO, SR., age 77, DeWitt, died January 1st. Born at Hopkinsville, Kentucky, he graduated from the Memphis Hospital College of Medicine in 1906 and had previously taught school in Arkansas county. He was a member of the board of stewards of the Methodist Church and a charter member and past-president of the Rotary Club. Surviving are two sons, Dr. C. W. Rasco, Jr., DeWitt, and Dr. J. B. Rasco, DeWitt, and two daughters.

KENNETH KNOX KIMBERLIN, age 70, of Tuckerman, died January 2nd after an illness of two months. Born in Indianapolis, September 20, 1882, he graduated from the Indiana College of Medicine in 1904 and returned to Arkansas where he was first associated with his father in practice. He was a past president of the Jackson County Medical Society, a member and chairman of the board of deacons of the Methodist church, a member of the Masonic Lodge and formerly city alderman. Surviving are his wife, a son, Dr. K. K. Kimberlin, Jr., of Detroit, and a daughter.

ZUBER N. SHORT, age 80, formerly of Hot Springs National Park, died at Buena Vista, Georgia, December 26th. A graduate of Hahne-man Medical College in 1905, he had practiced in Hot Springs National Park since 1898 until his retirement about two years ago. He was a past-president of the Rotary Club, an organizer of the Boy Scouts, a life member and past master of Hot Springs Masonic Lodge No. 62, a life member and past high priest of the Royal Arch Chapter, a life member and past commander of the Knights Templar, a past grand high chief of the Grand Royal Arch of Arkansas, a past grand commander of the Knights Templar of Arkansas and life member of the Council of Royal and Select Masters and had received the Silver Beaver award of the Boy Scouts. Surviving him is his wife.

JONATHAN HOYT, age 56, died July 23rd after a long illness. A graduate of Stanford University and of the University of Oklahoma School of Medicine, he served in World War I and had practiced at Dardanelle, Waldron and Crossett, at which city he was associated with the Crossett Health Center until ill health forced his retirement in 1950. Surviving are his wife and a son.

HENRY E. COCKERHAM, age 79, died at his home in Portland October 29th. A graduate of Tulane University of Louisiana in 1895, he immediately began practice in Portland. He married Miss Mary Frances Pugh in 1899 and the couple celebrated their golden wedding anniversary in 1949. He was a member of the Board of Stewards of the Methodist church, a 32nd degree Mason and a Shriner, a charter member of the Portland Hunting Club and a fellow of the American Medical Association. Surviving are his wife and two daughters.

E. RUSH BARRETT, age 50, died at his home in Jonesboro December 31. A graduate of Tennessee University School of Medicine in 1929, he first located in Wilson, later moving to Jonesboro. He entered naval medical service December 8th, 1941 and was discharged with rank of lieutenant-commander. Since the war he had continued active duty with the naval reserve corps. He was a past-president of the Craighead-Poinsett County Medical Society and a fellow of the American College of Surgeons and of the International College of Surgeons. Surviving are a son and two daughters.

PROCEEDINGS OF SOCIETIES

The Pope-Yell County Medical Society was addressed December 18th at Russellville by Roy I. Millard. W. O. Young, Secretary.

Members of the Pre-Med Club of the Arkansas A. & M. College at Monticello were guests of the Drew County Medical Society for a showing of the motion picture, "Your Doctor."

M. C. Edds, Mulberry, recently addressed the Crawford County Medical Society on "Infectious Hepatitis." Officers elected are: President, W. T. Holman, Jr.; vice president, Riley Cowan; secretary-treasurer, M. C. Edds; delegate, S. D. Kirkland, and alternate, G. K. Patton.

Clark County Medical Society has elected the following officers: President, J. W. Kennedy; vice president, J. W. Reid, and secretary-treasurer, Eli Gary.

The Association of Tumor Staff Clinic Members in Arkansas was addressed January 29th by A. M. Holtzman, on "Some Psychiatric Factors in Cancer Control and Treatment."

The Ninth Councilor District Medical Society met in luncheon session at Springdale December 5th. The program consisted of a motion picture on hyaluronidase, and addresses by Frank G. Kumpuris, Little Rock, "Surgical Diseases of the Heart;" Henry Pringos, Little Rock, "Treatment of Congestive Heart Disease," and W. G. Reese, Little Rock, "Utilization of the Physician-Patient Relationship in Practice."

Independence County Medical Society has elected the following officers: President, Chaney W. Taylor; Vice-president, C. A. Churchill; Secretary-treasurer, Ruth Junkin; Delegate, Hickman Calaway, and Alternate, Charles Taylor.

Mississippi County Medical Society has elected the following officers: President, Jack Webb; Vice-president, R. L. Johnson; Secretary-treasurer, Weldon Rainwater; Program Director, John Q. Elliott, and Censor, Joe Beasley.

Washington County Medical Society has elected the following officers: President, G. H. Butler; Vice-president, Coy Kaylor, and Secretary-treasurer, Stanley Applegate.

Hot Springs County Medical Society has elected the following officers: President, N. B. Kersh; Vice-president, Morgan C. Berry, and Secretary-treasurer, H. Jennings Douglas.

PERSONALS AND NEWS ITEMS

Oscar Gray, Jacksonville, has been recalled to active duty with the naval medical corps.

Wayne Biggs, Clinton, has entered on active duty with the army medical corps.

Calvin J. Dillaha, Little Rock, served as an instructor at the recent session of the American Academy of Dermatology in Chicago.

Contribution to the American Medical Education Foundation during November by Gardner H. Landers, of El Dorado, has been announced.

Fred H. Krock has been elected president of the First Lutheran congregation at Fort Smith.

Dr. and Mrs. C. W. Hall, Greenwood, spent a recent vacation in Wyoming and California.

Fount Richardson, Fayetteville, has been appointed Chairman of the Scientific Program Committee for the Mexico, D. F., meeting to be held following the annual session of the American Academy of General Practice in Saint Louis.

Stanley M. Gates, Little Rock, recently addressed the Pulaski County Tuberculosis Association.

The Journal regrets the error whereby the name of W. M. Gross, Fort Smith, was omitted in the roster of members of the Sebastian County Medical Society, published in the December issue.

John H. Adametz, who recently completed his residency in neurological surgery at the Neurological Institute, New York, has become associated with Robert Watson in Little Rock.

James W. Peavey has moved from Pine Bluff to Monticello.

C. M. Poynor recently addressed the Berryville PTA.

D. C. Lee and W. R. Lee have been installed as coroner and deputy coroner, respectively, of Garland county.

The many friends of Mrs. Elizabeth Richardson, formerly librarian at the University of Arkansas School of Medicine, will regret to learn of her serious illness and of her hospitalization at Saint Vincent's Infirmary, Little Rock.

E. E. Estes, recently addressed the Fordyce Rotary Club on "Why People Kill Themselves."

Paul L. Day, Little Rock, recently received the Southwest Regional Award of the American Chemical Society.

The Mid-South Postgraduate Medical Assembly will meet in Memphis February 10th, 11th, 12th and 13th under the presidency of H. T. Smith, McGehee.

Wayne Stanfield has joined T. E. Williams and H. M. Baird for practice of eye, ear, nose and throat at Newport.

Ralph G. Kramer, Fort Smith, has been recalled to active duty with the navy medical corps and assigned to Great Lakes Naval Station.

"A Fable," Chairman's Address before Section on General Practice, Southern Medical Association, by Fount Richardson, Fayetteville, appears in the January issue, Southern Medical Journal.

Robert Watson, Little Rock, attended the meeting of the Association for Research in Nervous and Mental Diseases in New York during December.

Dr. and Mrs. J. W. Morris, McCrory, celebrated their 51st wedding anniversary December 18th.

Gilbert O. Dean, Little Rock, attended the recent meeting of the Southern Surgical Association in Hollywood, Florida.

J. D. Olson and T. P. Foltz, Fort Smith, attended the recent meeting of the Western Surgical Association in Houston.

W. A. Bullock, formerly of Elk City, Oklahoma, has located at Cotton Plant, taking over the practice of W. J. B. Williams who has moved to Henning, Texas.

Contributors to the American Medical Education Foundation during December were: A. M. Grasse, Calico Rock; C. D. Gunter, Siloam Springs; T. G. Johnston, Little Rock; J. D. Huskins, Siloam Springs; W. E. King, Russellville; L. H. McDaniel, Tyronza, and J. A. Norton, Little Rock.



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NAUSEA and VOMITING associated with
pregnancy
drugs (certain antibiotics, etc.)
electroshock therapy
narcotization

VESTIBULAR DYSFUNCTION associated with
streptomycin therapy

VERTIGO in

Ménière's syndrome
hypertensive disease
fenestration procedures
labyrinthitis
radiation sickness



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BOOK REVIEW

Toxemias of Pregnancy: By William J. Deickmann, S. B., M. D., Second Edition. Pp. 710, 95 illustrations, 1 color plate. Saint Louis: C. V. Mosby Co., 1952. Price \$14.50. This is a complete reference book on the subject.

Rheumatic Diseases—Based on the Proceedings of The Seventh International. Prepared by The Committee on Publications of the American Rheumatism Association: Charles H. Slocumb, M. D., Chairman. 449 pages with 126 figures. Philadelphia and London: W. B. Saunders Company, 1952. Price \$12.00.

This volume has been prepared from the presentations at the Seventh International Congress on Rheumatic Diseases and presents the views of the contributors on all phases of the rheumatic disease problem.

Psychosomatic Gynecology: Including Problems of Obstetrical Care: By William S. Kroger, M. D., Assistant Clinical Professor of Obstetrics and Gynecology, Chicago Medical School, and S. Charles Freed, M. D., Adjunct in Medicine, Mount Zion Hospital, San Francisco, California. 503 pages. Philadelphia and London: W. B. Saunders Company, 1951. Price \$8.00.

This work is a conscientious effort to guide the physician in the handling of psychogenic states which may attend obstetric and gynecologic problems. Study of the text will prove most valuable to the physician who wishes to understand the emotional background of the gynecologic and obstetric patient.

Callander's Surgical Anatomy: By Barry J. Anson, M. A., Ph. D., (Med. Sc.), Professor of Anatomy, Northwestern University Medical School; and Walter G. Maddock, M. S., M. D., F. A. C. S., Elcock Professor of Surgery, Northwestern University Medical School. New 3rd Edition.

1074 pages with 929 illustrations. Philadelphia and London: W. B. Saunders Company, 1952. Price \$14.00.

This text has been carefully revised with the addition of more than 300 new illustrations. Anatomical variations are well shown. Landmarks are illustrated in addition to the discussion on basic anatomical features. This is a worthwhile reference volume.

Prescription for Medical Writing—A Useful Guide to Principles and Practice of Effective Scientific Writing and Illustrations: By Edwin P. Jordan, M. D., and Willard C. Shepard. 112 pages with 26 figures. Philadelphia and London: W. B. Saunders Company, 1952. Price \$2.50.

The author, experienced in medical writing, has written a small but complete book which undertakes to cover all phases of medical writing. It will be most helpful to the medical author.

Practical Clinical Psychiatry—7th Edition: By Edward A. Strecker, Litt. D., LL. D., M. D., Professor of Psychiatry, School of Medicine, University of Pennsylvania; Franklin G. Ebaugh, M. D., Professor of Psychiatry, University of Colorado, School of Medicine and Director, Colorado Psychopathic Hospital; and Jack R. Ewalt, M. D., Professor of Neuro-Psychiatry and Administrator of Hospitals, University of Texas Medical Branch, Galveston. Section on "Psychopathologic Problems of Childhood" by Leo Kanner, M. D., Associate Professor of Psychiatry, Johns Hopkins University School of Medicine. 35 figures, 14 tables, 506 pages; June 13, 1951. Price \$7.00. The Blakiston Company, Philadelphia 5, New York 22, Toronto 2.

This text has had seven editions which would indicate that it is considered a desirable volume by an increasing number of physicians. There is a limited amount of the text concerned with the psychoneuroses.

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POLYPOID DISEASE OF THE COLON AND RECTUM AND ITS RELATION TO CANCER; WITH SPECIAL CON- SIDERATION OF SURGICAL MANAGEMENT*

JOHN LAURENS, M. D.
Little Rock

The adenomatous polyp is by far the most common benign tumor of the colon and rectum. In routine sigmoidoscopic examination of large numbers of completely asymptomatic patients, the incidence of benign adenomas has been reported as high as twelve per cent. Furthermore, it has been stated that some form of polypoid hyperplasia of the colonic mucosa exists in fifty per cent of the people past thirty. These figures, in themselves, would not be so significant were it not for the intimate relationship between adenomas and carcinomas, both clinically and pathologically. There are many proctologists and pathologists alike who feel that the greatest majority, if not all, of the adenomas of the large bowel will eventually show abnormal changes, and if allowed to remain in situ, will become frankly malignant.

This discussion will concern itself primarily with the simple adenomatous polyp, excluding such conditions as the villous adenoma or papilloma, familial multiple polyposis, and the pseudo-polyposis associated with chronic ulcerative colitis. Although each of these bears a definite relationship to carcinoma, time and space will not permit us to dwell on them individually.

The exact etiology of colonic and rectal adenomas is unknown. However, the consensus of opinion is that the mucosal cells undergo proliferative changes, with the exact stimulus being undetermined. The rate of growth is variable and individual factors determine whether the new growth shall be a simple hyperplasia or progress to malignancy. Many men feel that an adenoma is but a stage in the development of malignancy, and that all carcinomas develop from previously benign polyps.

With regards to symptoms, as previously brought out, many of these lesions are asymptomatic. Bleeding will occur in about fifty per cent, and should arouse a suspicion of malignancy until proved otherwise. Fortunately, early pathologic examination of the great majority of polyps is possible, for it has been estimated that seventy to seventy-five per cent of them will be found in the rectum and distal sigmoid, within easy reach of the routine ten-inch sigmoidoscope. When we consider that at least seventy-five per cent of the cancers of the large intestine are also found within these limits, the necessity for a sigmoidoscopic examination in all patients within the so-called cancer age groups is further emphasized. Furthermore, I believe we will all agree that, in any case in which an adenoma is found, a careful investigation of the rest of the colon by means of barium enema and air-contrast studies should be carried out.

Concerning pathology and its role in determining treatment, it is of the utmost importance that the colo-rectal surgeon have a close understanding with his pathologist in order that he may know how to interpret the diagnosis rendered. All polypoid lesions should be biopsied, although the intact polyp makes a much more satisfactory specimen, and should be obtained if possible. There has been considerable debate over the part that the cellular characteristics of these adenomas should play in their treatment and prognosis. There are those who feel that, for a lesion to be malignant, actual invasion through the basement membrane is not necessary, and that the character of the epithelial cells themselves should be considered. This concept of carcinoma in situ is based on altered cellular characteristics and is adhered to by many of the outstanding pathologists in the country.

From the surgical point of view, I am in complete agreement with the above-mentioned concept of carcinoma in situ, or cellular malignancy. In collaboration with others,¹ I reviewed 800 cases of cancer of the colon and rectum, and we found that there were ninety lesions which, by histopathologic examination, were clearly shown to have had their origin in a benign adenomatous polyp. In addition, there were thirty tumors which, on

* Read before the Seventy-sixth Annual Session, Arkansas Medical Society, Little Rock, April 23, 1952.

microscopic study, presented presumptive evidence of a similar origin. Of the ninety cases definitely arising in a previously benign adenoma, there were sixty-one which were classified as malignant adenomas, or adenocarcinomas in situ, twenty-four grade I adenocarcinomas, and five grade II adenocarcinomas.

Having considered the pathologic relationship between adenomatous polyps and cancer, we now come to the subject of treatment. Small sessile adenomas within reach of the sigmoidoscope are destroyed by fulguration, a biopsy specimen first being obtained. Benign pedunculated lesions located in the rectum are removed completely, either with the electric snare, using a combined cutting and coagulating current, or else by simple excision, if they are suitably located. However, if the polyp is high, in the region of the rectosigmoid, or in the distal sigmoid, transabdominal sigmoidotomy with polypectomy is the procedure of choice. If the adenoma is on a long pedicle, and is soft and non-ulcerated, it is removed by local excision, and if multiple sections reveal no evidence of malignancy, this is all that is done. However, if the lesion is at all suspicious grossly, with ulceration or induration, or if the pedicle is short and broad, then a colon resection should be performed.

There has been considerable difference of opinion concerning the surgical management of the malignant adenomas and the low-grade adenocarcinomas confined to the rectum. As far as I am concerned, cancer is cancer, be it invasive or confined to a polyp. The first time one sees a malignant tumor of the rectum or colon is the best time to attack that lesion radically. Of course, individual factors, such as age, risk, etc., must necessarily alter one's method of treatment in certain cases, but generally speaking, I feel that a radical approach to these early, pre-invasive, in situ carcinomas, and the low-grade adenocarcinomas confined to a polyp, is justified.

Cancer of the colon and rectum is one of the most satisfactory types of visceral malignancy with which the surgeon has to deal. It is universally accepted that the primary requisite for adequate cancer surgery is block excision of the tumor and its lymph-bearing areas, and nowhere else in the body is one afforded a better opportunity for doing this than in the large bowel.

The question arises: is it necessary to perform an abdominoperineal excision of the rectum with abdominal colostomy for these malignant polyps? First, I would like to make myself clear on one point—the proper treatment of invasive cancer of the rectum is a radical Miles abdominoperineal

excision. However, when dealing with the type of polypoid lesions described above, there is an alternate method worthy of merit, which for all intents and purposes is an adequate cancer operation, if used properly and selectively. I refer to the Babcock-Bacon "pull-through" abdominoperineal proctosigmoidectomy with preservation of the external sphincter.

A great deal of controversy has arisen during the past decade concerning the preservation of the anal sphincters in the treatment of cancer of the rectum, and the major part of this discussion has been based on the question of lymphatic drainage. There is no argument over those lesions involving the anal canal and the distal rectum—that is those segments whose lymphatics drain inferiorly and laterally—and all will agree that an abdominoperineal excision with abdominal colostomy is the treatment of choice in such instances. However, when dealing with lesions of the rectum above the level of lateral lymphatic spread, one is confronted with the problem of whether or not the anal sphincters need be sacrificed. There are some men who feel that all malignant lesions of the rectum and rectosigmoid, regardless of location and pathologic characteristics, should be removed by a classical abdominoperineal excision, while others feel that, in certain instances, the continuity of the bowel may be re-established by either an anterior or posterior resection with end to end anastomosis, or by an abdominoperineal "pull-through" with preservation of the sphincter musculature.

Each is entitled to his own opinion, and far be it from me to be dogmatic about such a subject. Nevertheless, I would like to present some of the "pros" and "cons" of the "pull-through" operation for certain selected cases of pre-invasive carcinomas, and low grade adenocarcinomas confined to polypoid lesions of the rectum. As previously pointed out, this discussion is limited to lesions occurring above the level of lateral lymphatic spread. Contrary to what was once thought, these lymphatics do not accompany the levator muscles, but course with the middle hemorrhoidal vessels in the lateral ligaments of the rectum, which are above the levators. Actual anatomic studies have shown that the area of the rectum drained by these lymphatics extends from the anorectal or pectinate line upwards for a distance of about three centimeters. Furthermore, it has been demonstrated that, unless the superior lymphatic pathways are blocked by tumor emboli, as is often the case in far advanced carcinomas, retrograde spread to lymph nodes is of relatively little importance. Likewise, additional data have shown

that the extent of spread along the intramural lymphatics in the wall of the intestine is rarely more than two centimeters from the lesion. It therefore appears logical to conclude that lesions situated more than five centimeters above the pectinate line will ordinarily not metastasize laterally.

With regards to involvement of the levator ani and sphincter muscles, a recent study at the Mayo Clinic² of 210 surgical specimens of cancer of the lower sigmoid, rectosigmoid, and rectum removed by the combined abdominoperineal excision failed to reveal a single instance of extension of the carcinoma along the lateral zone of spread. On the other hand, it was found that, in 40 per cent of the specimens in which the lower border of the lesion was two centimeters or less above the levators (approximately five centimeters above the anal margin), the internal sphincter was involved by the tumor. However, there was no evidence of involvement of the external sphincter, and it was concluded that, when considering sphincter-preserving procedures, saving this muscle is not contraindicated.

There is considerable difference of opinion as to just what procedure should be employed when a sphincter-preserving operation is decided upon: that is, a low anterior resection, an abdominosacral excision with posterior anastomosis, or a "pull-through" type of operation patterned after the Babcock-Bacon abdominoperineal proctosigmoidectomy. Dixon has reported as high as 67 per cent five year cures with the anterior resection, but these figures have not been approached by others. Technically, the operation can be extremely difficult in an obese individual with a narrow pelvis, and recently, Dunphy,³ in Boston, has emphasized that, whereas in the preserved, shrunken, formalinized specimen a margin of two centimeters below the tumor is felt to be adequate to account for retrograde spread, this actually must measure about ten centimeters at the time of surgery. Furthermore, and of even greater importance, is the extremely high recurrence rate, both at the site of anastomosis and in the pelvis, reported by many authors. It is now felt that one of the primary reasons for this is the actual implantation of exfoliated tumor cells in the suture line, such cells having been demonstrated to literally coat the mucosa of the bowel distal to the lesion. Finally, I would reiterate that the rectum is by far the most common site of carcinomas of the large bowel, and it is a well-established fact that the mucosa in the vicinity of a cancer frequently undergoes a diffuse hyperplastic change and may be the site of a new and inde-

pendent lesion at a later date; so why leave this "susceptible" bowel in place?

With regards to posterior anastomosis, most of the aforementioned disadvantages persist, plus the fact that there is an even higher incidence of fistulae and strictures at the site of anastomosis. Concerning the Babcock-Bacon "pull-through" operation, several outstanding advantages exist which do not obtain with the other procedures. First of all, and I would like to emphasize this, it is an entirely adequate operation from the standpoint of radicability, and if performed properly, does not, as many have maintained, compromise the limits of resection; secondly, all of the distal bowel is removed except for an inconsequential segment of anal canal; thirdly, no anastomosis is necessary; and lastly, the external sphincter muscle remains intact, even though the levators and the internal sphincter are removed. On the other hand, there are certain disadvantages which can not be overlooked. The work of Gaston⁴ has shown that the presence of the lower rectal segment, that is the last six centimeters, is necessary in order to have a normal defecatory reflex, which is initiated in this area and mediated through the autonomic nervous system. These patients, therefore, do not have fecal continence in the true sense of the word, though they do have voluntary control of the sphincter muscle. In addition, mucosal prolapse of varying degrees may occur, and strictures are prone to develop, though these depend in large extent on one's technique and experience.

What lesions are suitable for removal by such an operation? I have already discussed the factor of the level above the pectinate line in relation to the lateral ligaments and their lymphatics. As mentioned previously, these are located about three centimeters above the anorectal or pectinate line. The anal canal itself measures 2.5 to 3 cm. in length and, therefore, the lateral ligaments will lie about 6 cm. above the anal verge or skin margin. Considering the factors of first, possible retrograde spread by way of the intramural lymphatics and subsequent communication with the lateral lymphatic pathways, and second, the actual retrograde spread outside of the wall of the bowel by way of major lymph channels to nodes distal to the lesion, it appears justifiable to conclude that lesions at least 10 cm. from the anal verge would almost certainly be at a safe distance above the lateral area of lymphatic spread. The next criterion, the extent of visible gross involvement, must necessarily be determined at the time of surgery. As previously stressed, any rectal carcinoma with extension through the wall of the

bowel to the perirectal tissues or to contiguous organs should be removed by the classical abdominoperineal excision. However, if the lesion is confined to the mucosa, or even better, is arising in an adenoma, then it is a very satisfactory one for removal by a "pull-through" operation. Thirdly, if there are any grossly involved lymph nodes, or if frozen section of suspicious nodes reveals metastatic tumor, then an abdominoperineal with colostomy should be done.

In summary, therefore, the three criteria that should be fulfilled before performing an abdominoperineal proctosigmoidectomy with preservation of the sphincter muscle for cancer of the rectum are as follows:

- (1) Adequate distance of the lower level of the lesion above the area of lateral lymphatic spread which to me means at least 10 cm. above the anal verge or skin margin, or 7 cm. above the pectinate line.
- (2) Confinement of the growth to the wall of the bowel, that is, a Duke's "A" lesion.
- (3) No evidence of lymphatic metastasis.

The polypoid tumors of the rectum that we have been discussing most certainly will satisfy the above-mentioned criteria. The malignant adenoma, or carcinoma in situ, is, as its name denotes, confined to that segment of mucosa from which it arises. However, it is but a step to actual invasion, and for this reason, the polyp should be considered malignant and treated accordingly. The low-grade adenocarcinomas arising in a polyp and confined to the mucosa, likewise are only locally malignant, but they, like any other cancer, deserve the benefit of radical surgery. In conclusion, therefore, it is my firm conviction that the above-described radical approach to these adenomatous lesions is not only justifiable, but is another important step in the prophylaxis of rectal cancer.

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TREATMENT OF LIVER FAILURE*

ALFRED KAHN, JR., M. D.
Little Rock

A great deal more interest is being centered on liver disease and its treatment in recent years. Probably this stems from the fact that medicine in general is going from a period in which interest was centered mainly on mechanical things, as anatomy and pathology, into a period in which biochemical tools are being used to broaden our fields of knowledge. The liver, being a gland without much mechanical function, was not well understood until biochemical research was focused on it. Although there is much about hepatic disease that we do not understand, there is no need to consider the liver a chemical factory that is too complex for us to work with. I would like to go over with you some of the essential points in the treatment of chronic liver disease, because cirrhosis is not necessarily a disease that gets progressively worse; it is amenable to treatment.¹

In other words, the cardinal premise around which this talk is oriented is that chronic liver disease is, in varying degrees, reversible. Functionally, the chronically ill liver behaves just like the chronically ill heart; it goes through periods of compensation and decompensation. These phases are physiologically recognizable by improvement in the function tests, and pathologically distinguishable by the liver biopsy. The cirrhotic liver shows 2 main features: fibrosis and injury to the so-called cord cells. The fibrosis is not to any great extent reversible; the cord cells may undergo great improvement.² Since the important functions of the liver are carried out in the cord cells, every effort should be made to restore them, regardless of the degree of fibrosis. Here are some of the ways to promote health in the cord cells.

For a long time, we have been told that patients with decompensated liver disease must rest in bed. No one seemed to know exactly why these cases did better on bed rest—but they did. Those of us who saw the big hepatitis outbreak in Africa during World War II, were very impressed with the need for bed rest in convalescent liver cases. Although we still do not know the complete answer on this problem, some new leads have been found by Bradley in circulation through the liver.³ A catheter was stuck into the hepatic vein and the amount of blood flow returning from the liver was measured. It was found at rest, that 25% of the cardiac output went to the liver. On the other

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hand, if the subject merely changed from a lying to a standing position, the amount of blood flow through the liver diminished markedly. Exercise had a similar deleterious effect in decreasing the blood supply. In a study of over 3,000 cases of acutely decompensated liver cases due to virus-hepatitis, Dr. Swift and his co-workers found that convalescence was prolonged approximately 2 weeks if the patient exercised before recovery.⁴ Bed rest is important in liver disease.

A second important part of the treatment of liver disease is proper diet, a mainstay of the so-called Patek Method treatment.⁵ Proper diet is now generally held to mean high protein, high carbohydrate, and moderate fat.

There are several reasons why a high protein diet (140 grams or more) seems desirable. First of all, the experimental work of Chaikoff and Connor,⁶ as far back as 1940, demonstrated that cirrhosis could be produced in dogs on a high fat-low protein diet.^{7,8} Secondly, it has been shown that methionine, one of the amino acid building stones from which proteins are made, was valuable in preventing dietary induced cirrhosis. Thirdly, in chronically decompensated livers, the blood albumin is apt to be low; the recovering liver, being the sole source of albumin, needs an abundance of building materials to manufacture enough albumin to make up the deficit.

A variety of clinical experiments will show the recovering liver's need for protein. For example, we ordinarily take 1 gram of protein for every 2 1/4 lbs. of body weight per day to be the minimal requirement. In order to test the effect of protein in hepatic decompensation, a group of patients received only 0.2 gm. of protein (2 1/2 lbs.) a day. Although these patients seemed somewhat better clinically, punch biopsy of the liver showed no anatomical improvement until adequate protein was given.⁹

This protein may be supplied in several forms. Unquestionably meat or meat-like products in the diet are the best modes. Despite the high price of meat, dietary meat is the cheapest means of supplying protein. Moreover, there is some evidence to believe that whole proteins supply a certain nutritional factor not found in synthetic mixtures of amino acids.^{10,11} Our high protein diet here includes 150 plus grams of protein per day.

With amino-acids now prepared for intravenous use, considerable advertising pressure has been exerted to try and obtain their use. Actually, intravenous amino acids have been proven effective in supplying the dietary needs for protein in patients with liver disease.¹² However, ex-

cept in unusual situations, there is no need for this uneconomic method of protein administration. The same may be said for using human plasma as a source of protein; as a matter of fact, in one carefully controlled study by Faloon, a group of patients, using human plasma as the only source of protein, not only failed to benefit much, but actually showed some serious complications as a pulmonary edema, fatal hemorrhage from esophageal varices, and effusions.¹³ These remarks about the use of intravenous protein and protein products, should not be interpreted as contradicting their use, but rather, that they are intended to point out that, under ordinary circumstances, dietary meat is the best source of protein.

Another important feature of the diet in liver disease is the feeding of large quantities of carbohydrate. A daily average of 300 grams or more of carbohydrate should be fed the decompensated cirrhotic. This can be supplied in the diet or as a supplemental feedings, as: candy, or it may be given intravenously. If intravenous glucose is given, it should be given slowly so that loss through the kidneys is minimized.

There are several reasons for giving large amounts of glucose. One of them is that glucose was found by Opie and Alford in 1914, to exert a so-called protective action on the liver.^{7,8} If adequate amounts of glucose are present, there seems to be a certain antidotal action against some liver tonics. The liver also has a very important regulatory function of the blood sugar;¹⁴ the liver is the agent that removes glucose from the blood streams and stores it as glycogen in time of plenty; in time of need, when the blood sugar begins to fall, the liver releases sugar into the blood stream. This sugar regulatory function is under the control of the pancreas, pituitary, and adrenal.¹⁵ Obviously, if the liver is diseased, this regulatory function is impaired. Thus, an abundance of sugar should be offered the liver, to try and compensate for failure to perform this regulatory function precisely. For these 300 grams of sugar per day are recommended in hepatic insufficiency.

The problem of fat in the diet of these patients has been undergoing some re-evaluation. All of us have seen post mortem slides of the liver in cirrhosis; one of its most prominent features is the abundance of fat-filled cells. In the past, it was certainly logical to assume that if there was an excessive amount of fat in the liver, then the dietary fat should be cut to a minimum. It now seems, in the light of present knowledge, that although dietary fat may influence the amount in the liver, a more important source of control is by

the so-called lipotropic factors; these factors act to prevent the accumulation of fat in the liver. Choline is the best example of this group; it acts by increasing the rate of phospholipid turnover. The phospholipids in turn act as carriers of the fat. Another lipotropic factor that we have all heard about, is methionine. Methionine acts by breaking up to furnish a building stone (methyl group) for the formation of choline.¹⁶

A rough analogy of this would be to compare the fat in the liver to an enormous coal pile; any freight train, whether diesel or steam, that hauled coal away is analogous to the lipotropic factors that haul the fat. Choline could be compared to the locomotive of the train; without a locomotive, the number of trains passing the coalpile would be small; choline acts by hooking itself up to a molecule of glycerine; this is the freight car that carries the fat. The couple between the glycerine freight car and the choline locomotive is phosphoric acid. The chemical train can then carry fat from the liver if it has fuel. Methionine is analogous to the fuel our choline locomotive burns, in order to pull the train. To carry this comparison a little bit further, and go back to the question of diet in cirrhosis, it would seem that no matter how much coal is put on the pile, if enough trains come through to haul it off, the coal pile will never get too big.

So it is with dietary fat. From rigid restriction of dietary fat to 70 or 60 grams per day, we now allow up to 130 grams per day. This is possible because we give adequate amounts of these lipotropic agents. Choline is given in doses of 1 to 6 grams per day.

The matter of vitamins in liver disease has been discussed since Dr. Patek reported his series of cases. It is apparent from clinical observation, that a truly adequate vitamin supply is necessary in hepatic decompensation. On theoretical grounds, this is desirable for the vitamins, by definition, cannot be synthesized in the body, and they are necessary in the body to expedite many chemical functions. For example, the vitamin B group is particularly important in the release of energy for muscular needs. Currently on the market are a variety of therapeutic vitamin formulas which supply far more than the minimal daily requirements.

In any discussion of chronic liver disease, the question of alcoholism arises. What part does alcohol play in producing or aggravating liver disease? All of us have seen cirrhosis with no history of alcoholism. On the other hand, in Dr. Bockus textbook, he states that the incidence of alcoholism in cirrhosis varies from 19% to 86%.¹⁷

An average figure for this appears to be from 35% to 45% as determined by autopsy. Recently this problem has been re-examined by Dr. Best and his collaborators at the University of Toronto; they used laboratory animals—not a clinical trial on humans.¹⁸ Their results indicated that there was no more toxic effect on liver cells from alcohol than from sugar. They were able to produce fatty changes and fibrosis consistently in rats just as easily with sugar or alcohol. These changes could be prevented by augmenting the diet with lipotropic factors. Perhaps then alcohol simply acts to increase the liver's need for lipotropic substances; if this is so, alcohol should not be considered toxic in the sense of benzene, phosphorous, and similar hepatotoxins. However, since there are no critical human experiments on this point, it seems wise to withhold alcoholics from human cases of hepatic decompensation.

Up to this point, the general considerations of the treatment of liver failure have been discussed. Among the liver's many functions, there are some special ones, which, if unsatisfactorily performed, lead to very unpleasant symptoms, or serious physical impairment. One of the most troublesome problems of this type is water retention. This is mild in hepatitis, but may be most serious in cirrhosis, particularly if it accumulates as ascites. Ascites is probably due to at least several conditions; among them are increased portal vein pressure, low serum albumin, increased retention of sodium, and improper metabolism of the anti-diuretic hormone. Different ones of these factors seem to be predominant in different cases. In the Presbyterian Hospital series of cirrhosis, it was found that just decreasing the portal vein pressure with a portal vein vena cava shunt did not always relieve ascites.¹⁹ Other operations, as ligation of the hepatic artery, coeliac plexus, etc., are being tried. One would assume that rectifying an albumin deficit should correct ascites; this has been tried. Faloan administered salt-free albumin to cirrhotics with ascites; the albumin failed to improve the ascites or the underlying liver disease; the liver function tests showed no improvement.¹³ It was further shown by this group of investigators that giving albumin did not increase the excretion of sodium; this latter point is very important because all of us remember water is retained wherever sodium is retained. Thus, the implication appears that if lowering portal pressure and the giving of salt-poor albumin will not reduce ascites, perhaps a reduction of the sodium in the body would reduce the body's water content. This has been tried by Eisenmenger and his colleagues with success. With sodium eliminated

in the diet, their patients did not continue formation of ascites.²⁰

The therapeutic implication of this is that in hepatic failure, when there is any tendency to fluid retention, sodium should be eliminated from the diet. This may be accomplished by complete restriction. It probably can be accomplished by the eation exchange resins if the sodium in the diet is low;²⁸ these powders taken in quantities of 15 grams 3 times per day in milk, have the ability to take up a certain amount of the sodium in the gastro-intestinal canal that is ingested as food; resodex and carbo-resin are 2 examples. The effect is the same as sodium deprivation. Other means of ridding the body of sodium are mercurial diuretics and paracentesis. I would like to interject a word of caution here. Recently, in the J. A. M. A., Dr. Henry Schroeder pointed out the serious consequences of lowering the body's extracellular sodium level under the limit of tolerance.²¹ It produces drowsiness, weakness, anorexia, thirst, cramps, nausea, and vomiting. Nelson reported 2 cases of this syndrome following abdominal paracentesis.²²

In hepatic failure, there may be a serious bleeding tendency. One of the principal reasons for this is the failure of the liver to convert vitamin K to prothrombin. This does not occur in mild impairment of the liver, but does appear in moderately advanced cases. Therefore, in surveying these patients prior to treatment, a prothrombin time should be performed. If it is low more than maintenance doses of vitamin K should be given to try to get the liver to correct the prothrombin deficit. A practical point here, is that since vitamin K is oil soluble, and can be absorbed from the intestine only if bile is present, the vitamin K should be given parenterally. It is commercially available in ampules, varying from 4 to 72 mgs.

There are 2 groups of drugs that are currently arousing great medical interest: the antibiotics and the adrenal cortex hormones. We cannot be sure of their place in the liver insufficiency. Aureomycin, a representative antibiotic, has been studied in severe hepatic disease by Goldbloom and Steigmann.²³ It was their feeling that it had a beneficial action; others have reported similar results. The reason for the improvement is not apparent, but it may be due to an antibacterial effect in the intestine or hepatic circulation. On the other hand, aureomycin in large doses has been shown to produce liver injury—particularly fatty infiltration.²⁹

Cortisone and the adreno-corticotrophic hormone (ACTH) of the pituitary should be effective on purely theoretical considerations on the treat-

ment of liver disease. Dr. Webster has reviewed the considerations that favor the use of whole adrenal extract or cortisone.²⁷ For example, adrenalectomized animals lose glycogen from their livers; if adrenal cortex extract is then given, liver glycogen increased; this is not necessarily a direct effect. Cortisone acts similarly to adrenal cortex extract. Cortisone and ACTH, by stimulating the adrenal cortex to form cortisone, inhibit fibrosis. Dr. Aterman,²⁴ at the University of Chicago, gave carbon tetrachloride to rats; it induced fibrosis; if cortisone were given with the carbon tetrachloride, no fibrosis resulted.

In addition to experimental studies in the laboratory, adrenal cortex extract and some of its components have been tried on humans. Nine patients with liver decompensation were given adrenal cortex extract by Webster, and they are reported to have recovered promptly. Dr. Colbert, with the Hepatic Research Team in Germany, gave the adreno-corticotrophic hormone to 5 patients with acute viral hepatitis; the patients showed a marked symptomatic improvement and a fall in the blood bilirubin.²⁵ Opposed to these favorable reports, the Mayo Clinic found that cortisone was of no value in 2 cases that they studied;²⁶ both the laboratory tests and clinical appearance failed to show improvement. These physicians reviewed the reports in the literature, up to the time of publication of their work and did not find conclusive evidence favoring the use of cortisone. At the Montefiore Hospital in New York, Rifken and his colleagues have reported that ACTH and cortisone favorably influenced the course of 4 cases of homologous serum hepatitis.³⁰

The treatment of the decompensated liver consists mainly of a diet high in protein and carbohydrate, adequate rest, and the avoidance of substances that are injurious to the liver. Additional therapy to treat complications, as bleeding, may be necessary at times. The new wonder drugs have not yet found their niche in liver therapy.

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TUMORS OF THE NECK

T. P. FOLTZ, M. D.
Fort Smith

I.

INTRODUCTION

There is no anatomical area in the body more affected by tumefaction than that of the neck. Similarly, there is no type of tumefaction which challenges the diagnostic acumen of the surgeon and pathologist alike so strongly as does that found in the neck. It is of prime importance that the two—surgeon and pathologist—work in closest harmony, each confining himself to that which he knows, to produce as clear a diagnosis as possible and to achieve the best possible end result.

II.

DIFFERENTIAL DIAGNOSIS

In the differential diagnosis it is first the surgeon's duty to note accurately the exact location of the tumor, the presence or absence of inflammation, the depth of the tumor, its consistency before extirpation, and its relationship to adjacent structures. It is also extremely important in order to aid the pathologist to arrive at an accurate final diagnosis to determine whether the tumor is in the midline, in the anterior, posterior, or digastric triangle. It is also important that a careful history be obtained of the duration of the existence of the tumor and whether or not there is presence or absence of pain.

To quote from Hertzler — "Having noted in which area of the neck the tumor lies and its relation to the fixed and movable structures about it, historical data then comes into account. What is the duration—years, months or days? Years when congenital, months when neoplastic, days when inflammatory. If painful, was it so from the beginning, suggesting inflammation; or has pain developed only recently, suggesting invasion of a neoplastic disease?"

III.

CLASSIFICATIONS OF DISEASES OF THE NECK

A very excellent classification of diseases of the neck is found in Cole and Elman's Textbook of General Surgery. The classification which we have used recently is a modification of this classification and is herewith presented:

(Slide to be used)

CLASSIFICATION OF NECK TUMORS

I. Neoplastic:

- a. Benign
- b. Malignant

II. Cystic:

- a. Retention
- b. Congenital

III. Inflammatory:

- a. Acute
- b. Chronic

IV. Miscellaneous:

- a. Aneurysm
- b. Metabolic
- c. Glandular
- d. Hematoma
- e. Herniation

IV.

CASE REPORTS

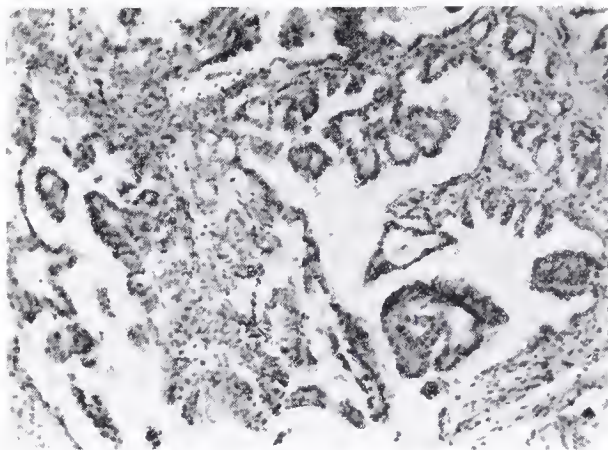
It is on the basis of this classification that we have tried to make diagnoses on the cases which we will present today and to illustrate the categories in which these fit.

Case No. I.

(Harry Bunker) White male, age 43.

Diagnosis: Adenocarcinoma of the Thyroid.

This first case, a carcinoma of the thyroid, illustrates a tragedy which is too frequently seen.



CASE I

Papillary adenocarcinoma of thyroid gland.

The lining epithelial cells are often times well differentiated. The bizarre structure of the glands and vascular invasion in other areas established diagnosis of malignancy.

I think it is the consensus at the present time that all nodular thyroids should be considered surgical, regardless of whether they are toxic or nontoxic, because we knew a great percentage of both the toxic and nontoxic nodular goitres do undergo malignant change. It has been estimated by vari-

* Read before Arkansas Chapter, American College of Surgeons and Southwestern Surgical Congress, Hot Springs National Park, Aug. 25, 1952.

ous clinics that this rate varies from 15 to 27 per cent.

This patient reported on April 1, 1952, complaining of difficulty in swallowing due to an enlargement in the right side of his neck. He stated that he first noticed this enlargement approximately one year previously. The physician consulted at this time did a basal metabolism on him and told him that due to the fact that this test was normal and that the gland was not toxic that he did not need to be operated upon unless there was an increase in the size of the tumor.

This patient was operated upon on April 4, 1952, and the entire right lobe and isthmus was removed. The left lobe was normal in every respect and was not removed. Grossly, the right lobe measured 67 x 40 x 28 mm. It contained many nodules in the central portion, but the remainder of the tissue appeared to be colloid tissue. Microscopic section proved the growth to be adenocarcinoma of the right lobe of the thyroid with venous invasion.

This patient made an uneventful convalescence from his surgery and even though there was beginning venous invasion, since there were no glands present, it was elected to treat this patient with deep x-ray therapy rather than by radical neck dissection. The patient was last seen on August 10, 1952, and at this time there was no evidence of recurrence. This case illustrates to my mind the fact that all nodular goitres should be looked upon as potentially malignant and should be treated surgically as soon as the diagnosis of nodular goitre is made.

Case No. II.

(L. B. Barry, Jr.) White male, age 68.

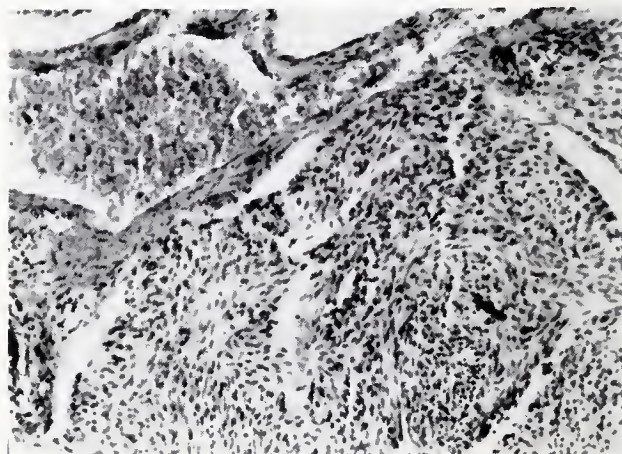
Diagnosis. Unclassified malignancy, metastatic in lymph node of the neck.

This case illustrates procrastination again on the part of the physician and not on the part of the patient in respect to treatment of neck tumors.

This patient was seen on May 20, 1952, with a chief complaint of pain and swelling in the left side of the neck. He dated the history back approximately one year, at which time he noticed a small nodule on the left side of the neck. Upon consulting his physician he was told it was merely an enlarged lymph node and to leave it alone unless it grew rapidly. Within the past few months the node had grown rapidly to roughly the size of a hen egg. The mass was in the left posterior triangle, was smooth and firm and freely movable. It was considered at this time that this in all prob-

ability was a metastatic node. Complete physical examination was negative throughout except for total deafness which had been present for twenty years. X-ray of the chest and of the gastrointestinal tract was entirely negative.

The gland was excised on May 28, 1952, and there was one adjacent node which was removed for study, though it appeared entirely normal.



CASE II

Spindle cell tumor metastatic in cervical lymph node:

The primary site was never determined. Differential stains failed to reveal cell type. The lesion may probably represent a melanoma but pigment completely lacking.

No other glands were demonstrable. Sections from this gland have been studied by local pathologists and have been sent to the University of Arkansas Medical School to Dr. E. Lloyd Wilbur, of the Arkansas Baptist Hospital, Little Rock, and to Dr. A. P. Stout, Institute of Cancer Research, Columbia University. All are agreed that it is malignant, but none are agreed as to its origin. Dr. Stout states that in his opinion this is probably malignant melanoma which has not formed melanin. This is more probable than the diagnosis of metastasis from the thyroid and further, in my opinion, the case is beyond cure, and I cannot believe that taking out the ipsilateral thyroid lobe would do more than satisfy curiosity. This patient at the present time is doing well, and there is no evidence of local recurrence or evidence of any mother tumor anywhere in the body.

Case No. III.

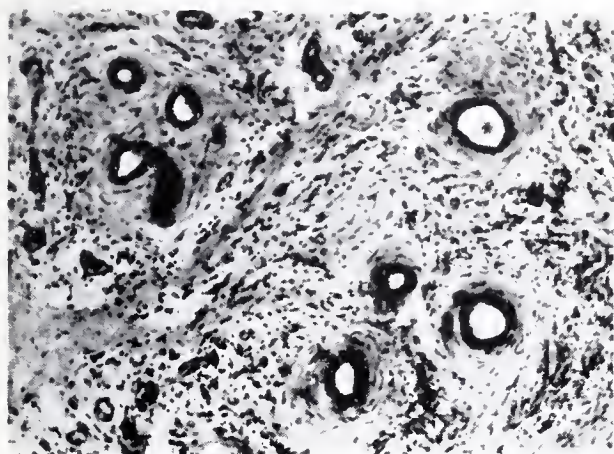
(Elmer Smith) White male, age 22.

Diagnosis: Chronic inflammation, sub-maxillary gland.

This next case represents a lesion which we frequently see and is only reported because of its frequency and interest to the general surgeon.

This patient gave a history of a swelling in the left side of the neck just inferior to the mandible and which swelling had been intermittent for the past two years. One year before the submaxillary gland had been removed at a Veterans Hospital. Within a few months after the removal of this gland, the swelling recurred and persisted with a draining sinus in the old scar. A diagnosis of chronic infection of the remaining portion of the submaxillary gland was made and the patient was operated upon on July 2, 1951, the remaining gland and inflammatory tissue being excised. The

muscle and internal jugular vein to properly expose the tumor. Following this, the tumor was easily enucleated, there being no secondary inflammatory change or adhesions. The patient made an uneventful recovery and was last seen



CASE III

Chronic inflammation of submaxillary gland.

The secretory glands are completely replaced by a dense fibrous tissue surrounding the remaining small ducts. The fibrous areas are infiltrated by inflammatory cells.

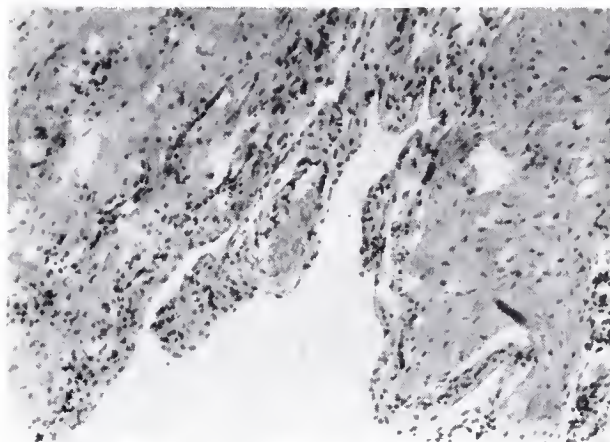
patient made an uneventful recovery and was last seen on July 15, 1952, with no evidence of recurrence and without complaint. This case is reported merely to show that when conservative methods have failed, either in removal of a stone in Wharton's duct or in the gland itself, that complete surgical extirpation is the only treatment to be considered.

Case No. IV.

(Dale Martin) White male, age 21.

Diagnosis: Cystic Hygroma.

This patient was a twenty-one year old white male with chief complaint of swelling of the left side of the neck which had been present for two years. Examination revealed a soft tumor underlying the inferior portion of the left sternomastoid muscle, the main mass being one inch superior to the left clavicle and did not extend below the clavicle. The tumor was soft and fluctuant and no bruit or pulsation was present. X-rays of the chest and blood studies were negative. The patient was operated upon on September 29, 1950, and it was necessary to divide the sternomastoid



CASE IV

Cystic hygroma:

A congenital condition with cystic dilatation of lymphatic spaces. The section shows a portion of the wall, the lumen lined by endothelium. There is some inflammatory reaction in the wall.

in January, 1952, with no evidence of recurrence.

Whereas this tumor did not extend into the chest, I would like to show a slide illustrating a cystic hygroma with extension, and the patholog-

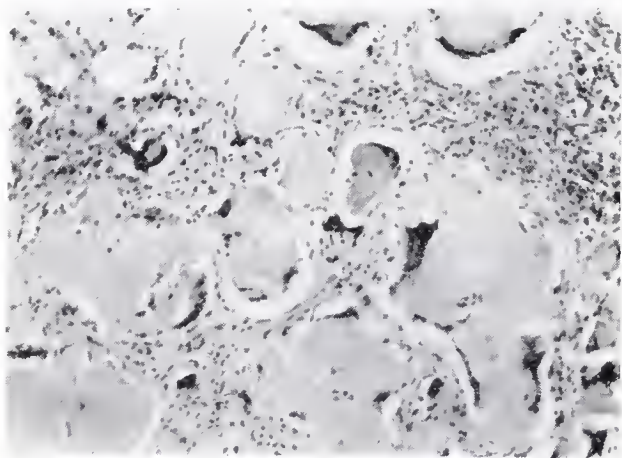
ical picture of the typical structure of cystic hygroma.

Case No. V.

(Warren Taff) White male, age 46.

Diagnosis: Amyloidoma of the neck.

This next case is an extremely rare type of neck tumor, and I would like to present this case before giving the diagnosis. This man was first seen on March 27, 1950, complaining of a swelling of the right side of the neck. The patient at this time gave a history that he had been perfect-



CASE V

Amyloid tumor of neck.

Amyloid deposits act as a foreign body and are surrounded by foreign body giant cells and areas of proliferative inflammation.



Case No. V
Amyloid Tumor of Neck
Before Surgery

ly well until 1945, at which time he was struck on the right side of the neck by a falling limb. A further history was given of the patient having a stiff, sore neck for the next three weeks, with a small amount of swelling and ecchymosis; however, this subsided and it was not until 10-12 months later that the present swelling became

apparent. Following this, glandular swelling began to be noticeable in the right side of the neck, which progressed slowly but continuously until the patient was first seen. There were no symptoms present except that of dyspnea on exertion and occasional dysphagia. The past history was noncontributory. Physical examination revealed a tumor extending from above the clavicle to the tip of the mastoid process and from the midline of the neck to the anterior and superior border of the erector spinae. The mass was smooth, hard and fixed; no bruit or pulsation was present. The patient was operated upon on May 12, 1950. This was an extremely technically difficult procedure as the tumor involved not only the internal and external jugular veins which had to be ligated as



Case No. V
Amyloid Tumor of Neck
After Surgery

well as the sternomastoid muscle, but also was densely adherent to the carotid sheath and the anterior cervical plexus. The patient made an uneventful recovery from the operation, the only complication being the presence of Horner's syndrome for the first postoperative week. The patient was perfectly well for one year after which time he developed congestive heart failure, with marked ascites and edema of the lower extremities and died of congestive failure June 29, 1951. This tumor was an Amyloid tumor of the neck, but we have subsequently learned that the tumor was only a localized manifestation of the generalized metabolic disease of amyloidosis.

Case No. VI.

(Charlie Rogers) White male, age 58.

Diagnosis: Lymphosarcoma.

This patient was first seen in the Tumor Clinic on May 7, 1952. He gave a history of swelling in the left side of the neck, which began as a small nodule in the superior clavicular area one year before. Examination revealed a hard, confluent swelling occupying most of the posterior triangle of the left side of the neck. A biopsy was taken under local anesthesia, and the pathological diagnosis was Lymphosarcoma. This patient was treated by X-ray therapy, but because of the far advanced stage of the tumor his progress was progressively downward, and he expired on July 25, 1952.



This case again represents procrastination, not on the part of the doctor, but on the part of the patient. However, as we are all aware of the

mortality rate of lymphosarcoma, it is doubtful if prognosis would have been different had this patient been seen earlier.

V.**CONCLUSION**

In conclusion, six cases of neck tumors have been presented. To illustrate the importance of this type of growth, it has been demonstrated that the neck is the most frequent site for tumefaction and that many of these tumors are highly malignant. It is for this reason that diseases of the neck are considered of such great importance and necessitate prompt and adequate treatment and close cooperation between the surgeon, pathologist, and radiologist, if these patients are to be given curative treatment.

Further, these six tumors have been presented in order to illustrate a cross section of the various types of tumefaction present in the cervical area, rather than to show only the rare and unusual lesion. It has been shown that the simple infections such as the submaxillary gland are relatively easy to diagnose and to treat, but that on the other hand there are others such as the unclassified malignancy of the lymph node, which defy diagnosis in spite of meticulous efforts on the part of all concerned.

A plea is made that because of the disastrous outcome resulting from improper history, improper examination, and procrastination on the part of both physician and patient that diseases of the neck be given their proper place in the list of diseases producing serious morbidity and high mortality.

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BOOK REVIEW

Gynecologic and Obstetric Pathology. With Clinical & Endocrine Relations: By Emil Novak, A. B., M. D., D. Sc. (Hon., Trinity College, Dublin; Tulane), F.A.C.S., F.R.C.O.G. (Hon.). 595 pages with 630 illustrations, 19 in color. Third Edition. Philadelphia and London: W. B. Saunders Company, 1952. Price \$10.00.

A deservedly popular text for the practitioner and student, fully revised and containing new illustrations.

The Treatment of Injuries to the Nervous System. By Donald Munro, M. D., F.A.C.S., Surgeon-in-chief, Department of Neurosurgery, The Boston City Hospital; Associate Professor of Neurosurgery, Boston University School of Medicine. 284 pages with 47 figures, Philadelphia and London: W. B. Saunders Company, 1952. Price \$7.50.

This text is written primarily for general use and presents the author's experience and views and will prove of value to general practitioners and surgeons who will care for these specific injuries.

Culdoscopy A New Technic in Gynecologic and Obstetric Diagnosis. By Albert Decker, M. D., D.O.G., F.A.C.S., Clinical Professor of Gynecology and Obstetrics, New York Polyclinic Medical School and Hospital. Associate Attending Physician in Gynecology and Obstetrics, New York Polyclinic Hospital. 148 pages with 50 figures. Philadelphia and London: W. B. Saunders Company, 1952. Price \$3.50.

This is an interesting monograph on the use of the gynecological diagnostic procedure of culdoscopy.

Nutrition and Diet in Health and Disease. By James S. McLester, M. D., Professor of Medicine Emeritus, University of Alabama; and William J. Darby, M. D., Ph. D., Professor of Biochemistry and Director of the Division of Nutrition, Vanderbilt University. New, 6th Edition. 710 pages with 14 figures and 145 tables. Philadelphia & London: W. B. Saunders Company, 1952. Price \$10.00.

This new edition presents a wealth of information upon a subject too often insufficiently considered as a corollary to the treatment of disease in general.

The important literature relative to present knowledge of nutritional requirements is well-surveyed and impartially presented. Sections dealing with basic nutritional concepts to be used in the best care of all sick people are particularly valuable, and one is surprised at the number of very basic points which most of us ignore or neglect in our attempts to treat all sick people comprehensively.

The sections on classic nutritional deficiencies is given adequate treatment without undue emphasis.

The bulk of this text deals with specific nutritional outlines and precepts for every major disease or disease type. Since each is handled separately, there is much repetition of the same material but perhaps this makes it particularly valuable as a reference text. If one knows the diagnosis, one can read through a short section and be well informed on all that nutrition can contribute to the patient's recovery and well-being. Complete diet plans are included where indicated.

The writing is good and the presentation so excellent that reading straight through is no chore.

Diseases of Metabolism—Detailed Methods of Diagnosis and Treatment. Edited by Garfield G. Duncan, M. D., Director of Medical Division, Pennsylvania Hospital; Clin-

ical Professor of Medicine, Jefferson Medical College, Philadelphia, Pennsylvania. New, 3rd Edition. 1179 pages, Illustrated. Philadelphia and London: W. B. Saunders Company, 1952. Price \$15.00.

The new edition of Duncan is excellent. Duncan and his collaborating authors have always maintained a very liberal definition of metabolic disease. Here, again, every disease with any significant metabolic implication or alteration is taken up. Presentation of basic metabolic knowledge has been handled particularly well in the first section of the text. Although some of the authors are well known to have controversial opinions concerning certain points, each has presented a surprisingly comprehensive and unbiased survey of the entire field with which he treats. This is most unusual and refreshing in these days when many texts and sections are written almost entirely to present the author's personal viewpoint.

Clinical information and interpretation is complete right up to the present moment.

Since this text covers all the basic science and clinical material usually handled too briefly and inconclusively in most textbooks of internal medicine, it is almost indispensable to medical student, internist and practitioners of all types. The new edition is so advanced, complete and up-to-date that it is a practical necessity.

It is extremely well-written and easy to read.

CORRESPONDENCE

February 17, 1953.

Dr. J. J. Monfort, Secretary,
Arkansas Medical Society,
Batesville, Arkansas.

Dear Dr. Monfort:

As per your request, I wish to give you a report of the affairs in my district as well as the things accomplished as Councillor of the Fifth District of the Arkansas Medical Society. As you know, the Fifth District consists of the counties of Bradley, Cleveland, Dallas, Columbia, Ouachita and Union. My term began in April, 1951, and I was elected for a two-year period.

Due to the fact that I have never made any written notes of any of our Councillor meetings, I will have to depend mostly on my memory in getting up this particular report. At our recent meeting held at the Marion Hotel in Little Rock on January 18th, as you will recall, it was moved, seconded and carried that each Councillor, in the future, be mailed a copy of the minutes of all regular meetings of the Council. Consequently, from now on, provided the above request is carried out, it will be far easier for the Councillor of each district to make up a report that will be of real value to the Society as a whole.

Insofar as I recall, I have attended all of the regular scheduled Councillor meetings during my

term, and it has been my good fortune a number of times to bring my Vice-Councillor, Dr. George C. Burton, along with me. At least, either I or my Vice-Councillor have been present at all regular meetings. At a recent call meeting of the various members of our Society, held in the Lafayette Hotel in Little Rock on January 25th, neither Dr. Burton nor myself could attend at that time, but we arranged to have Dr. David Yocum represent Union County at that particular meeting. As you know, this meeting was called in an effort to organize the doctors solidly behind the matter of having the cigarette tax continue on for our Medical Center.

In addition to attending my own County Society meetings regularly, and keeping said Society well informed as to the workings and accomplishments of our entire Council all along, I have also attended meetings of the Fifth Councillor District Medical Society and have endeavored to enlighten the members of our Society insofar as possible. During my term of office, these meetings have been held in Magnolia, Warren, Camden and El Dorado.

As to the specific functions and duties carried out by me at the regular meetings of our Council, it should be unnecessary to mention these at this time as the minutes of our Council should be self-explanatory.

At one of our meetings held in the fall of 1952, the question of merging certain rather weak County Societies with a neighboring Society was brought up, and it so happened that one of the counties, Cleveland County, was in my district and I was delegated to obtain information relative to the possible merger of this county with Jefferson County. I contacted Dr. W. G. Hancock of Rison, Arkansas, who is Secretary of the Cleveland County Medical Society. Dr. J. H. Scroggin is President of this Society, but has recently moved to Benton, Arkansas, still retaining his membership in the Cleveland County Medical Society. As you will recall, I arranged for Dr. Hancock to attend our Council meeting held in Little Rock in October, 1952. Dr. Hancock was of the opinion that he would have several more doctors in his county possibly within another year and desired that we postpone the merger of his county with Jefferson County at least for one more year. At that time, I moved that this be done and the motion was carried.

Relative to the feeling of my district as to the advisability of admitting negro doctors into the membership of various County Medical Societies and in the Arkansas Medical Society, I was able

to contact most of the officers of the County Societies in my district, and these Societies were very definitely opposed to admitting negro doctors either into their County Societies or to the Arkansas Medical Society. This question has come up at our regular Councillor meetings during my term on several occasions. Endeavoring at all times to do what I felt was my duty, and endeavoring to carry out the wishes of the various County Medical Societies in my district, I have steadfastly and unwaiveringly fought against the admission of negro doctors into our Society. Also, it was further felt by these doctors that we could accept the negro doctors into our organization, allowing them only partial privileges of our Society. In other words, they were of the opinion that the negro doctors could be accepted in such a manner as to permit their attendance of our scientific programs either in the County Societies or the State Society, but be excluded from our many social functions concomitant with our regular meetings. I feel sure that the above mentioned doctors are very much in the minority in considering the entire membership of our State Society. However, wishing to obtain legal knowledge of this procedure, I contacted and obtained the opinions of three of our most prominent attorneys in this part of the state. I personally talked with Judge Joe K. Mahony, Judge Henry S. Yocum, Sr., and Judge Gus W. Jones, all three of these attorneys residing in El Dorado. It was the unanimous opinion of these three attorneys that, under the existing laws, no negro doctor would have to be admitted into either our County Societies or our State Society unless the members of these Societies voted to admit them. It was further the opinion of these attorneys that in case one or more negro doctors were accepted into either our County Societies or our State Society, that their membership could not be so limited as to have them participate in our scientific programs and not participate in our social functions. Consequently, our usual dinner dances which we hold each year at our various meeting places, would be attended not only by the negro doctors, but also their wives and daughters would expect to attend these gala occasions. They would have to be accepted as full pledged members and be granted all the privileges enjoyed by any other member of our organization. Although it has come to my knowledge that already some of our societies, particularly Pulaski County, has recently accepted negro doctors into their Society, I am of the opinion that it will be a difficult matter for them to be able to force their negro members into membership in our State Society. Person-

ally, I believe if a vote should be taken at this time, at least 85 to 90% of the members of our State Society would be against such a procedure.

Relative to continuing the cigarette tax for the further needed support of our Medical Center; I feel that I can report that practically all the doctors who are members of the County Medical Societies in the Fifth District are definitely in favor of continuing this particular tax indefinitely for support of our Medical Center. Relative to Union County, I feel that the doctors of this County Society are 100% in favor of this procedure. I have personally talked with our two Representatives and our Senator from this county and they are in favor of continuing this tax for this particular project.

I feel that the affairs of our Fifth District are in excellent condition at this time, and wish to state that I have had the wholehearted cooperation of practically all of the doctors in my particular district.

Hoping this gives you the desired information relative to the duties performed by me and the affairs of the Fifth Councillor District during my term of office of the past two years, I remain,

Yours sincerely,

D. E. White, M.D.,
Councillor Fifth District,
Arkansas Medical Society.

To the Editor:

In the recent January, 1953, issue of The Journal of the Arkansas Medical Society on page 123, second column, paragraph three, line 5, there is a typographical error of enough import that I think the correction should be made as soon as possible. The error occurred by the leaving off of a zero, making some doctors feel that possibly 1:100 instead of 1:1,000 epinephrine should be used in infants and small children. If this is used in the 1:100, serious results may take place in using this concentrated solution in the suggested amount in small children. When used in the intended 1:1,000 dilution, then the method is perfectly safe. There is a comma after the 1 which most people I feel will interpret as 1:1,000; however, I am afraid that some will interpret it as 1:100 which would lead to dire consequences if not corrected.

Thank you very much for your kind attention to this matter.

Very truly yours,
Cazort-Johnston Allergy Clinic
Thomas G. Johnston, M. D.

SPARKS FROM THE SECRETARY

With every doctor conscious of the fact that the par-taking of barbiturates is a vicious habit and a rather common one, it seems to us so foolish that lots of us will leave barbituates samples loose around the office, instead of locking them up where they belong.

There are many doctors, especially those in some of the larger towns, who occasionally get referred work from other doctors in the state. If we have occasion to call this doctor, very often we do not find their phone number listed on their professional card in the Journal. A word to the wise should be sufficient—put your phone number on your Journal card.

January 18, 1953—Council meeting at Little Rock, at which the decision was made to have a state-wide meeting for the purpose of informing doctors about the necessity for fighting for the Medical Center. Also attended, for a short time, a meeting of the committee of improvement in nursing service in Arkansas of which Dr. Hawkins is chairman. This meeting was well attended and I was very much impressed with the sincerity of the effort of these people to get down to some basic common facts and to improving our nursing service.

January 25, 1953—I attended a very large and most heartening turn out, imaginable for the meeting about informing the county presidents and secretaries regarding the necessity for keeping the cigarette tax for the Medical Center and discussion of the dangers of loosing our Medical Center. I saw a great many old friends that I had not seen since the Convention last year. I saw Earl Hunt with a small carved gadget, which he was proudly showing over the place to some of his friends, which seemed to me to be somewhat in the line of the epitome of wishful thinking.

Editor Bill Brooksher is one of the most unappreciative guys I ever saw. I gave him a large 400-page tome from an institute in Brazil, which describes a survey on some of the insect life in Brazil in Portuguese but because he doesn't read Portuguese very well he did not even put it in his library!

In all of the Medical Journals, which your scribe receives from various states we find editorial after editorial regarding the need for a business course of some sort in the Medical Schools. This course has something to do with the kind of equipment that would be necessary, the keeping of records, the keeping of the patient's records and such matters. Part of this course will be solved by the preceptorship, which is now in existence in Arkansas School of Medicine, but this writer is firmly convinced that the senior medical student needs a course in business records. He might even be better off if he had a course in income tax records!

January 27, 1953—Your scribe in the dual role of the secretary of the Medical Society and the Chairman of the Board of Directors of the Arkansas Division of the American Cancer Society testified at a Senate hearing on Senate Bill 35, which enlarged the Cancer Commission from five to seven and gave representation to the Cancer Society on the Cancer Commission. There was a little bit of argument, which caused a compromise of the bill to be accomplished and in which all sides were satisfied, except that it seems a shame that we had to display a disagreement among the medical profession because, of all times, we should be in accord.

Does any group need an internist? A man who has had a sub-specialty in heart disease? Dr. O. T. Cohen's son,

Bob, who is now in the staff of Trinity Hospital in Memphis is eligible for his American board and would like to locate in Arkansas with a group. His father, Dr. O. T., ear, nose, and throat man, recently passed away in Jonesboro.

PROCEEDINGS OF SOCIETIES

The Independence County Medical Society was addressed February 9th by J. J. Monfort, "The Rowland Test for Pregnancy." A motion picture, "Injuries to the Peripheral Nerves," was shown.

Ruth Junkin, Secretary.

The following were speakers before the Postgraduate Session on Obstetrics and Gynecology held at the University of Arkansas School of Medicine, February 2nd-4th: Chas. R. Henry, R. L. Turnbow, O. W. Beard, P. L. Day, Joe Presley, Willis E. Brown, Eva Dodge, Don Newland, D. Wallace, D. Warden, E. Jungck, Clark Gillespie, C. Sutherland, James Barker, L. Quattlebaum, and W. G. Reese. Guest speakers were C. G. Collins, New Orleans, and E. C. Hamblen, Durham, North Carolina.

The Sebastian County Medical Society was addressed February 10th by W. M. Gross, "Low Back Pain."

E. Z. Hornberger, Secretary.

The Craighead-Poinsett County Medical Society was addressed at its dinner meeting February 4th in Jonesboro by E. M. Cooper, "Radiographic Examination of the Stomach and Colon."

J. H. McCurry, Secretary.

The Ouachita County Medical Society was addressed February 5th by Francis Buchanan, Little Rock, on "Uses and Abuses of Antibiotics in Surgery."

R. B. Robins, Secretary.

The Pope-Yell County Medical Society has elected the following officers: President, Lewis Webb; Vice President, Max Mobley; Secretary-Treasurer, W. O. Young; Delegates, Robert Hood and Lewis Webb.

Boone County Medical Society has elected the following officers: President, Albert Hammon; Secretary-Treasurer, W. H. Breit.

The Fifth Councilor District Medical Society was addressed January 15th at El Dorado, by J. S. Speed, Memphis, "Routine Treatment of Colles' Fracture and Its Complications," and S. A. Drennen, Stuttgart, "The Workings of the Arkansas Medical Society."

Coming postgraduate programs to be held at the University of Arkansas School of Medicine are: Pediatrics, March 9-10th; Neurology, April 1st, and Medical Specialties, May 13th and 14th. Detailed programs will be mailed to members of the Arkansas Medical Society and may be secured on application to the Division of Postgraduate Instruction, University of Arkansas School of Medicine, Little Rock.

The Pope-Yell County Medical Society was addressed February 12th by Lloyd Wilbur, Little Rock, on "An Analysis of Bleeding Problems."

William O. Young, Secretary.

ANNOUNCEMENTS

The Pulaski County Medical Assistant's Association in cooperation with the Little Rock Vocational School is offering a refresher course for medical assistants and medical secretaries in the period March 4th through May 20th, 1953. The classes will be held at the Little Rock Vocational School, 601 West Markham Street, each Wednesday night from seven to nine o'clock. The registration of one dollar is the only fee. Additional information on the courses may be obtained from the director of the school at the above address.

Announcement is made that the Seventh Annual Rocky Mountain Cancer Conference will be held in Denver on July 8th and 9th. A detailed program will later be available.

OBITUARY

ROBERT L. SMITH, age 78 years, died January 14th. Born in Yell County, he graduated from the Eclectic Medical College, Cincinnati, in 1896, and established Saint Mary's Hospital in 1919. He was a past-president of the Pope-Yell County Medical Society, a honorary member of the Arkansas Medical Society, a fellow of the American College of Surgeons, a former mayor of Russellville and member of the Board of Trustees of Arkansas Tech and a past-president of the Rotary Club. Surviving are his wife and two daughters.

EVERETT C. MOULTON, Fort Smith, Arkansas, died July 19, 1952, at the age of 62 years. Born in

Stuart, Iowa, he spent the greater part of his boyhood in Fort Smith, where his father, Dr. Herbert Moulton, was engaged in the practice of eye, ear, nose and throat.

Graduating from the Fort Smith High School in 1907, Dr. Moulton entered Northwestern University where he received his B. S. degree in 1911 and M. D. in 1914. He was a member of Phi Delta Theta and Phi Rho Sigma social fraternities, and a Sigma Xi and Alpha Omega Alpha honorary scientific fraternities.

After post-graduate work at the Massachusetts Eye and Ear Infirmary, he became associated with his father in the practice of ophthalmology in Fort Smith. He served in World War I under Dr. Meyer Wiener in the Eye Center at Fort Oglethorpe, Georgia, and was awarded Selective Service Medal for voluntary civilian service in World War II.

In 1922, Dr. Moulton was certified by the American Board of Ophthalmology and later was made a Life Member of the American Academy of Ophthalmology and Otolaryngology. He was a member of the First Presbyterian Church of Fort Smith, Noon Civic Club, and American Legion. He was also a member of the American Medical Association, the Arkansas State Medical Society, Sebastian County Medical Society, and for many years a member of the Executive Staff of St. Edwards Mercy Hospital.

He is survived by his wife, one daughter, Mrs. George L. Eldridge, Jr., and his son, Dr. Everett C. Moulton, Jr., all of whom are graduates of Northwestern University. Dr. Moulton, Jr., represents the third direct generation of the family to practice ophthalmology at Fort Smith.

GEYER C. WOOD, age 66, Grady, died May 17, 1952, after a prolonged illness. Born at Little Rock, June 11, 1885, he graduated from the University of Arkansas School of Medicine in 1912 and served an internship at Saint Mary's Hospital in Hoboken, New Jersey. During World War I he served with the army medical corps and located at Grady in 1919. He was a member of the Blessed Sacrament Catholic Church of Grady, of the Fraternal Order of Eagles and a Fellow of the American Medical Association. Surviving relatives are his wife and two daughters.

THEODORE FREEDMAN, age 68, Little Rock, died February 7th. He had been closely associated with the Order of DeMolay since it started in the state and, as a member of the Grand Coun-

cil, supervised the work of the states' chapters. He was a founder of the North Little Rock Boy's Club and a retired Missouri Pacific System surgeon, a past master of Crescent Lodge, No. 403, F. & A. M., a member of the Little Rock Consistory, Scimitar Temple, Bendemeer Grotto, a 33rd degree Mason and a past patron of Florence Chapter No. 15, Order of the Eastern Star. He graduated from Saint Louis University School of Medicine in 1907. Surviving are his wife, a son and a daughter.

WADE H. L. CONNELL, age 89, Hot Springs National Park, died February 1st at Lancaster, South Carolina. Born at Bradford, Tennessee, August 1, 1863, he graduated from National Normal University in 1889. He was an elder of the First Christian Church and active in Masonic circles and had served on the Chamber of Commerce and in Boy Scout activities. Surviving are his wife and three sons.



TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

THE PROBLEMS OF TUBERCULOSIS CONTROL

By ESMOND R. LONG, M. D.,

Annals of Internal Medicine, November, 1952.

Recent advances in the treatment of tuberculosis have raised for new consideration the question of proper balance among the procedures now employed in control of this disease.

During the period from 1900 to 1925 there was a rapid advance in diagnosis due to improved roentgenological technics and bacteriological methods. Treatment, which, before 1925, had emphasized fresh air, proper food, and rest, acquired pneumothorax and collapse therapy. The second quarter century was one of accelerated development of case finding, hospitalization for purposes of isolation and care, a variety of measures for prevention, and finally social assistance for patients and their families.

This brings us to the opening of the third quarter. Optimists, watching the declining mortality from tuberculosis, predict its virtual eradication in the United States. Conservatives are concerned with the continuing high prevalence of known cases. In any event there is immediate urgency in coordinating and integrating the present measures. The decision as to the wisdom of a change or modification of our efforts will depend on our evaluation of the success of present measures of which a brief summary is presented for consideration.

Case Finding: There are three major methods of case finding today. The first is the discovery of cases by physicians engaged in private practice. Private practitioners are the ones most likely to have first knowledge of cases that have progressed to actual symptoms. The second is search for cases on a contact basis. This is essentially clinic practice and rests on the principle that one case of the disease comes from another. The third, mass roentgenographic surveys of large segments of the population, is organized on the sound theory that a large enough relatively inexpensive net will gather in most of the unknown cases.

Medical Treatment: Medical treatment has passed through the stages of primary emphasis on hygienic care, collapse therapy, surgical meas-

ures, and drug treatment, to the present period of a combination of chemotherapy and surgical practice, and effective rehabilitation. The cardinal requirement is the hospital bed for tuberculosis, and it is indeed the crux of present day problems.

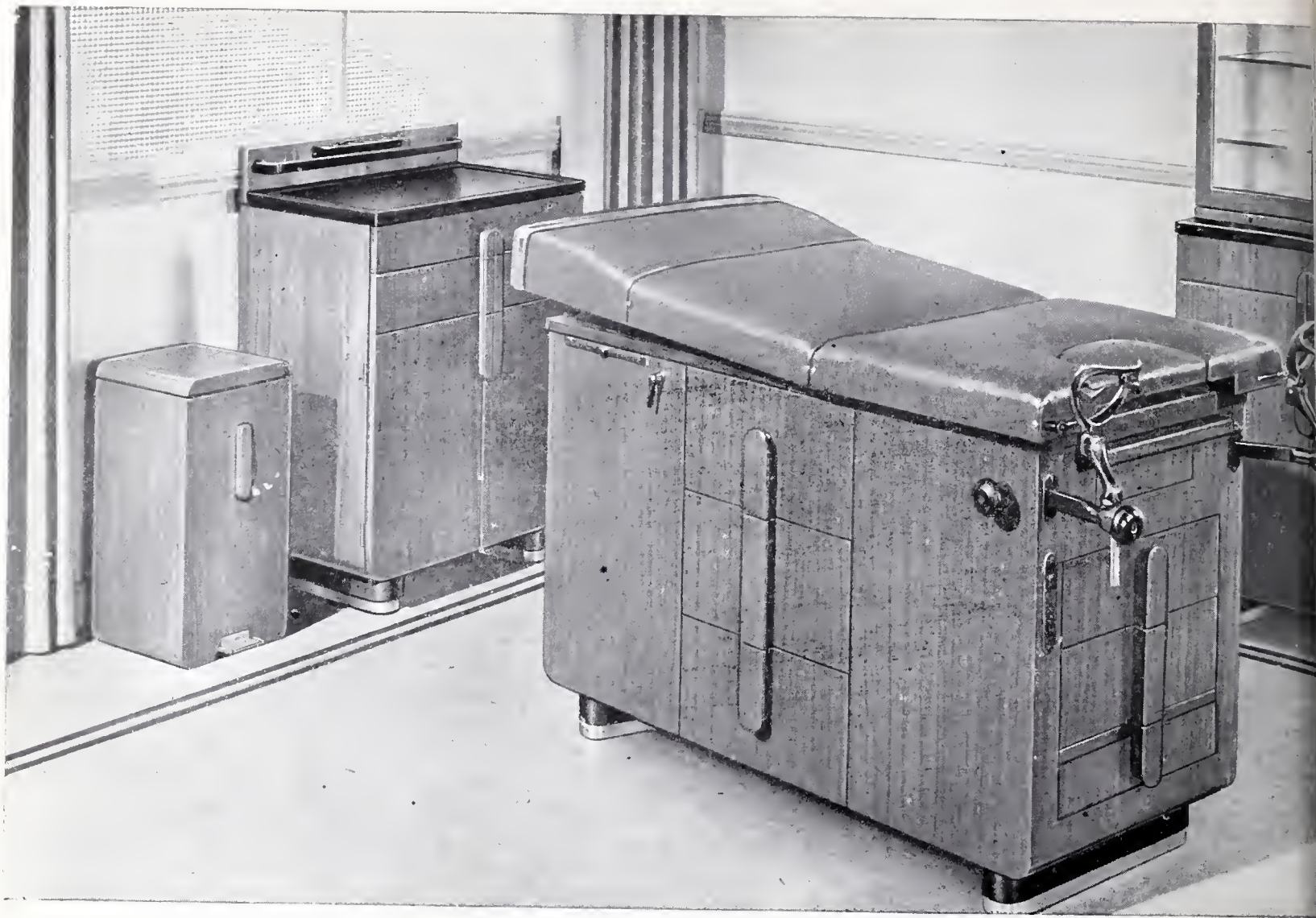
Prevention: Proper treatment is itself a large part of prevention because it removes sources of contagion from susceptible persons. In the best organized communities today, hospital treatment of the patient is supplemented by supervision and education of family at home. To this is added in small segments of our population, BCG vaccination.

Social Assistance: This varies all the way from abolition of the means test as a requirement for hospital admission to direct financial grants to a patient's family during the period of non-employment of the patient. All social assistance programs include rehabilitation of hospital patients. Experience has shown that the patient's morale and faithfulness in taking treatment depend in large part on the support given his family in his absence.

Mortality: Tuberculosis mortality in the United States declined 90 per cent from 1900 to 1950. The mortality in 1950 was only half that of 1945. Tentative figures indicate that the death rate for 1951 was 20 per 100,000 population. A breakdown by race, sex, and age shows that the mortality rate in non-white persons is about three times that in white persons, and that more than half of all deaths from tuberculosis now occur after the age of 45 years. The greatest number of deaths from tuberculosis today occurs in old white males.

Prevalence: It is agreed that the **known** prevalence of the disease has declined little in the last 20 years. Failure to decline is due, in part, to improved case-finding procedures and increased longevity of patients. The total number of cases of active disease in the United States is 400,000, approximately 250,000 of which are known to health departments.

Incidence: The average annual incidence of new cases reported in the whole country has been



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about 120,000 in recent years. The figure was 118,000 in 1951, a drop of 19,000 cases from the 137,000 in 1948. This drop is probably significant.

Hospitalization: Hospitalization is recognized as the core of tuberculosis control. Until recently the minimum number of beds required for adequate control was judged to be two and a half times the number of deaths from tuberculosis annually in the community. Three beds per annual death were recommended. Many communities are still far from meeting the minimum standard but some substantially exceed it. At present in the United States approximately 102,000 beds are set aside specifically for tuberculosis. The standards in the future may be based on known prevalence rather than deaths.

Cost of Tuberculosis Program: The annual total cost of tuberculosis control in the United States is calculated as \$350,000,000, exclusive of construction expense and the cost of training personnel. This includes the sums spent on hospitalization, which is figured at \$200,000,000 a year, or more than half the cost of the whole tuberculosis program. Finally, we may note that the average cost of one case of tuberculosis is about \$15,000.

With this background, what is the best plan for tuberculosis control in the future? Two courses are obviously open, viz., (1) to keep on as we are doing, improving procedures whenever possible, and (2) to revise the program by introduction of some new principle. We may rest reasonably well assured that in time the first of these procedures will relegate tuberculosis to a minor position among diseases, though only at great cost. It will mean a steady increase in measures for case finding, more hospital beds and larger sums for rehabilitation. If inflation continues, the dollar cost will be magnified. Even so, the price might be small in comparison with allowing tuberculosis to persist in our population.

A better course cannot be outlined now, but some elements of the program merit careful scrutiny. The hospital program costs \$200,000,000 and this will probably be increased. The internist may inquire if full advantage is being taken of the powerful force of private practice in supplementing hospital care. Hospitalization in effect does not provide for all the tuberculous patients in need of care and many hospitals have waiting lists. The latest and best methods of surgery and chemotherapy have not shortened but frequently have lengthened the optimum period of hospital stay.

Herein, however, lies one possible change in

which the private practitioner is concerned. After completion of the necessary active therapy and the accompanying indoctrination in personal care, could not the time-consuming final steps in the cure, particularly the essential long continued chemotherapy, be carried out at home, with safety and success, by private physicians?

This suggestion may have merit. Much depends on improved understanding of tuberculosis by physicians in general practice and on the character of the homes in which treatment is given. Tuberculosis is most prevalent today in the economically underprivileged. The problem is not purely medical, but is inextricably bound up with social issues. There is reason to hope that the standard of living will continue to rise. In the meantime, more intelligent application of the skills of practicing internists may solve part of the problem. Competent home after-care of tuberculous patients who have had a satisfactory course of institutional treatment, is one possible way of saving hospital time and relieving bed shortages.

HISTORIES OF PIONEER DOCTORS IN FAULKNER COUNTY

Compiled by Mrs. Gordon Page Oates, Little Rock

Uriah G. Dickens, M. D., was the son of Uriah and Susan Dickens, and was born in Carroll County, Tennessee, June 9, 1852. He was one of eleven children, he was reared on his father's farm in Arkansas and received his education from the common school. Upon completing his literary schooling he began the study of medicine at the age of twenty-four, under Enoch Dennis and in 1877 entered practice at Old Hickory post office, moving after three years to Enola, Faulkner County. After remaining in Enola for four years, he located in Pope County, but for the last four years practiced near Preston, Faulkner County, with excellent success. In 1872 he married Miss Mary Frances Polk, native of Georgia. Dr. and Mrs. Dickens had six children. He was a member of the Masonic Order and the Christian Church. He carried on farming with his practice.

* * *

Dr. David R. B. Greenlee, an esteemed and able practicing physician and surgeon of Faulkner County. Born in 1829 in Rockbridge County, Va., his parents being David and Hannah (Grigsby) Greenlee. He was one of twelve children. David received his literary education in Emory College, Washington County, Va., and his medical instruction in the University of Pennsylvania at Philadelphia, graduating in 1852. He began the practice of medicine the same year in Mercer County,

West Virginia, where he remained five years, spending the next four years in Chicot County, Ark. After which he went to Harper's Ferry and joined the Confederate army as a private. At the close of the war, returning to Chicot County, Arkansas, Dr. Greenlee resumed the practice of medicine. In 1868 he moved to Wichita, Kans. Then in 1883 he moved to Faulkner County where he had an extensive practice, being justly considered one of the most skillful physicians and surgeons in this part of the county. In 1871 he married Mrs. Amando (Boone) Gifford, and they had two children, she had three by a previous marriage. Dr. Greenlee had been a member of the Masonic fraternity since 1852. He was representative to the Grand Lodges in Virginia, Kansas, and Arkansas. He was a member of the Agriculture Wheel, and held the position of school director in Wichita, Kans., several years. He was a democrat, politically, and a member of the Presbyterian Church.

* * *

Dr. John Joseph Jones, was a prominent practitioner near Conway, Faulkner County, and was born in Hickman County, Tenn., in 1824. Parents were Allen and Elizabeth (Hicks) Jones. John was one of ten children. He spent his early life in Tennessee. He began the regular study of medicine in 1845 and was ready to practice three years later near Courtland, Alabama, where he remained until April 15, 1851, then removing to Arkansas. Practicing at Cadron Cave, he also put in the first stock of drugs at Springfield, and the first sawmill in the county, and the first drug store in the town in 1853. In 1857 he moved to Springfield. He bought some land. In 1876 he moved to Conway. He married Miss Marietta Gratehouse in 1856. They had eight children. Mrs. Marietta Jones died in June of 1870. In December of 1870, Dr. Jones married Miss Anna Watson, originally from Ireland. They had three children. Dr. Jones took a very active part in public affairs, and was representative from Conway County to the Legislature from 1854 to 1856. Dr. Jones was an active Farmer's Alliance man. He served as surgeon in the Confederate Army several months, but was compelled to leave the service on account of ill health. He could trace his ancestry in a direct line to the Jones family of Wales, who for more than five hundred years were kings.

* * *

Dr. J. F. Kincheloe, was a well known physician, and surgeon, and prominent druggist of Faulkner County, residing in Cadron Township, and was born near Athens, Tenn., in December, 1836.

He was one of six children born to Enoch and Mary (Grisham) Kincheloe. When a boy, young Kincheloe was reared and instructed in the duties of farm life, attending the schools in his native state. After thoroughly acquiring a good English education, he commenced to read medicine under the guidance of Dr. G. A. Long, but the Civil War compelled him to give up his study. He organized a company for the Federal Army known as the famous Co. A, commanded by Captain Kincheloe. When the war closed he continued in Tennessee and was occupied in teaching school until 1869. Then he resumed his medical studies and took a course in the Medical University at Nashville, Tenn. He graduated in 1871. Since that time he had been actively engaged in practice and also owned one of the finest drug store in Faulkner County. In 1885 he erected some buildings. In 1862 he married Miss Annie E. Taylor of Tenn. They had one daughter. She died in 1870. In 1873 the doctor married Miss Mary Virginia Allison of Atlanta. They had two children and she died in September of 1886. In 1887 the doctor married a Miss Mollie J. Robertson of Tenn. Dr. Kincheloe was a Republican, and a member of Green Grove Lodge No. 107 and Conway Chapter No. 80, and A.F. & A.M. of which he was treasurer for many years. He belonged to Center Link No. 75 I.O.O.F. and Faulkner Lodge No. 1624 and was a charter member and medical examiner of the last named order, also member of the G.A.R. He belonged to the Church of Christ.

* * *

Dr. H. B. Wear was a prominent representative of the medical fraternity in East Fork Township. One of twelve children born to William and Mary Ann (Tipton) Wear, in 1829 in Blount County, Tenn. Young Wear was reared to farm life, receiving an education in the schools of Alabama and having manifested a disposition to study medicine, was given every advantage to do so. He studied first in Cherokee County, Ala., and later at the Medical College at Nashville, Tenn., in 1856, and afterward at Atlanta, Georgia, where he graduated in 1857; beginning the practice of his profession in Cherokee County, Ala., in the same year. He married Miss Nancy Ann Townsend of South Carolina in 1857. In 1858 Dr. Wear moved to East Fork Township embarking at once upon an extensive practice all over the country. In 1859 he invested in farm land. He enlisted in 1861 at Springfield, Arkansas, for twelve months as surgeon captain. At close of war he located in Faulkner County. He was a Democrat in politics, a member of the

Masonic fraternity and has served his lodge as Worshipful Master at different times. Mrs. Wear died in 1885 leaving seven children. In 1886 Dr. Wear married Mrs. Minerva Sinclair (Ryan) of Missouri.

Presented by the Biography Committee, Woman's Auxiliary, to the Arkansas Medical Society. Mrs. Chas. W. Dixon, Chairman.

HISTORIES OF PIONEER DOCTORS IN PERRY COUNTY

Compiled by Mrs. Gordon Page Oates, Little Rock

Dr. William Davis Hill Creasey, both professionally and as an enterprising agriculturist, enjoyed wide and extended, as well as favorable acquaintance throughout Perry County. He was born in Sullivan County, East Tenn., November 20, 1824, son of Pleasant and Eliza W. (Hill) Creasey, both natives of Amherst County, Virginia. He was one of sixteen children. He spent his youth in Sullivan County, East Tenn., there principally receiving his education. In 1841 with his parents he moved to Terre Haute, Ind., where they resided sixteen years, during four years of which time William was engaged in hauling fruit to Chicago and after that was in business with his father shipping produce to New Orleans. In 1849, he and his father-in-law, Russell McVath started for Perry County, Ark. There the doctor continued to reside. Young Creasey studied medicine under some of the best physicians in Terre Haute and in 1885 at the requests of his friends began practicing in Perry County and soon became a leading physician. In 1856 he was elected justice of the peace of Aplin Township, serving two terms, during which time he was assigned to associate justice with Judge Price. He was surveyor of Perry County from 1868 on. He took a great deal of interest in the progress of the county and was a liberal supporter of all public enterprises. Dec. 5, 1845, Dr. Creasey married Miss Rutillia McBath, a native of Tenn. They had five children. She died in 1865. In 1866, Dr. Creasey married Mrs. Malinda (Price) Brandon, and they had two children. The doctor was intimately associated with this county's affairs.

* * *

Dr. G. Thomas Holmes, was born in North Carolina in 1836, parents were John and Phadra (Perry) Holmes, who in 1844 moved to Tenn. and from there to Perry County, Arkansas, in 1856. Dr. Holmes was one of eleven, and spent his youth and early manhood in Tenn., and there received a common school education. His medical learning

was obtained under the instruction of Dr. L. D. Hill of Perry County, and from 1880 practiced his profession with ability and success. Coming to Perry County, in 1856, he remained until the beginning of the war, when he entered the Confederate service in Co. H. in the first regiment ever organized in Arkansas. He was first sergeant the first year, and then ordnance sergeant until the close of the war. At the close of the war Dr. Holmes went to Dardanelle, Ark., and was engaged in the drug business until 1873. In 1876 he was elected justice of the peace, serving two years, and in 1878 was elected representative of Perry County for one term. In 1882 he was elected State Senator, serving four years. In 1881 he was appointed postmaster at Nimrod. He was a Democrat. Member of the Methodist Episcopal Church, South. In 1861 he married Miss Aurelia P. Craig, who was born in Mississippi, Jan. 1839, and died in 1886. They had six children. In every position to which Dr. Holmes was called he manifested an earnestness and faithfulness to the interests of those whom he served.

* * *

Edison Haywood Owen, practicing physician and surgeon of merit. Born in Tippah County, Mississippi, in 1848, one of nine children of Larkin James and Pamela Ann (Johnson) Owen. Edison was reared in what is now Lincoln County, receiving his education in Mississippi, and attending college two years at Clinton. But owing to poor health did not graduate. He received his medical instruction in Lincoln County under Dr. Thomason, graduate of a Medical College in N. Y., Dr. Stanfield, a graduate of Memphis, Tenn., College, and Dr. Steward, a graduate of New Orleans Medical College. Dr. Owen first began practicing thirteen years ago and came to Perry County in 1882 where he enjoyed a large and lucrative practice. He was also a minister of the Missionary Baptist Church, ordained in 1871. He was a Master Mason, and a member of Perryville Lodge No. 238. He was a Democrat and honorary member of the Hermeanian Society of Mississippi College. He married Miss Mary E. May in 1876 in Tippah County, Miss. Dr. Owen also had a farm and a store of general merchandise and drugs.

* * *

Dr. John E. Price, druggist and physician, was born in Washington County, Tenn., in 1841. Son of Joseph D. Price and Elizabeth Young Price. Dr. Price was one of eight children. He was reared in Tennessee, where he received most of his education and subsequently began the study

of medicine there with Dr. Thomas T. Young. In 1868 he entered upon the practice of medicine and in 1871 came to Perry County, Arkansas, where he soon became prominent and had a lucrative practice, a great deal of which he was obliged to give up on account of his health. He served in the Union Army about three years. In 1870 he married Miss Sabra E. Taylor of Carter County, Tenn. She died in 1871, leaving one child. In 1877 Dr. Price married Miss Rhoda J. Guerin, who was born in Perry County. They had one child. The doctor was a member of the Masonic orders. He was appointed one of the county supervisors by Governor Baxter, and had served as superintendent of public instruction and special probate judge, by virtue of the appointment of Governor Garland. He was a Republican and a member of the Christian Church. He was an influential citizen and highly respected, his career during his location in Perry County having been marked by close application and earnest devotion to the interests of those among whom he had labored.

Presented by the Biography Committee, Woman's Auxiliary, to the Arkansas Medical Society. Mrs. Chas. W. Dixon, Chairman.

EDITORIAL DENVER SESSION OF THE AMERICAN MEDICAL ASSOCIATION

Over 6,500 registered at the December, 1952, interim session of the American Medical Association held in Denver.

The theme of the scientific session was directed to the general practitioner and both the exhibits and the program were so designed that procedures and items of interest to the general practitioner were presented. A feature was the televised Cesarean section, estimated to have been viewed by over five million people.

The House of Delegates considered the usual number of resolutions, one of the most contested being the care of veterans. The final decision was for a continuing study of this problem in conference with officials of veterans societies, hospital associations, dental societies and other interested groups. The doctor-draft law was the subject of numerous resolutions without definite solution.

LOOK AND SEE IN CANCER DETECTION

Physicians generally may not be fully aware of the amount of public education about cancer which has been effected in the past decade through the efforts of the volunteer agency, the American Cancer Society. The public has con-

stantly been urged to seek the advice of their physicians on any phase of cancer. Too often, it seems, the needed help has not been forthcoming from the physician or it has been woefully inadequate.

With continuance of the program of cancer education there has arisen the desire on the part of many intelligent citizens for a careful cancer detection examination. Regretably, this too, has been shunted aside by the busy physician. These people have been told that only by careful and periodic examinations may early cancer be found in its most hopeful stage for cure. The physician who "brushes off" the patient who earnestly seeks to determine if his vague symptom, or his disturbing sign, may mean cancer, is doing that patient and medicine a great wrong.

The possibility of cancer should be ever in mind by the physician in all of his examinations. The rule should be to "**look and see**," not to "wait and see." The physician's office is the true cancer detection center.

PERSONALS AND NEWS ITEMS

Lee A. Dean and W. L. Jefferies have moved into new offices at 222 North Second Street in Rogers.

Dean Wallace recently addressed the Little Rock X-ray Technicians meeting.

A. R. Brown, Searcy, recently addressed the P.-T. A. on "The Emotional Child."

Floyd Smith has located at Trumann.

M. H. Cheshire has located at Luxora.

Keith B. Kennedy has located at Trumann.

Rodger Dickinson, DeQueen, recently addressed the P.-T. A. on "Good Citizens Promote Health and Safety in the Community."

Donald Purcell and Henry Durst have located at Paragould.

Jack Barnwell has located at Cabot.

J. W. Cass, Jr., has located at Pocahontas.

Chas. R. Henry, Little Rock, addressed the American Medical Association Council on Rural Health at its meeting in Roanoke, Virginia, February 26th, on "The Place of the Physician in Rural Health Activities."

F. Walter Carruthers, Little Rock, conducted an instructional course at the recent Chicago session of the American Academy of Orthopedic Surgery.

E. A. Mendelsohn has been elected president of the Fort Smith Lodge, B'Nai Brith.

J. J. Monfort, Batesville, has been elected President, Churchmen's Association (Episcopal), Diocese of Arkansas.

Paul L. Mahoney, Little Rock, announces the association with him of H. A. Ted Bailey in the practice of otolaryngology, bronchoesophagology and respiratory allergy.

Haynes G. Jackson has opened his office for the practice of obstetrics and gynecology at 304 Medical Arts Building, Hot Springs National Park.

AUXILIARY NEWS

The Woman's Auxiliary to the Arkansas Medical Society held its regular Spring Board meeting on February 3, 1953, at the Hotel Marion. With twenty-two members present, the meeting was called to order at eleven o'clock by Mrs. A. A. Little, President.

Reports were given by seven officers, six committee chairmen, one council woman and five county presidents.

Mrs. Little announced that we again have a committee on Cancer Control, with Mrs. Mason Lawson as Chairman, and who, in this capacity, will serve as a representative of the Auxiliary on the Cancer Commission.

The Board re-affirmed its stand on retaining the cigarette tax for the completion of the Medical Center. Also, upon the motion of Mrs. Jack Kennedy, Chairman of the Revisions Committee, the Board voted to change the name of the Civil Defense Committee to the Disaster Preparedness Committee, as requested by the Medical Society.

It was announced that Dr. R. C. Dickinson has been appointed to serve on the Advisory Board, filling the vacancy left by the resignation of Dr. Dan Autry.

Mrs. J. Harry Hayes, General Chairman of the State Convention, presented to the Board for

their approval a tentative program for the Convention.

Mrs. T. Duel Brown
Recording Secretary.

The Pope-Yell County Medical Auxiliary met Thursday evening, January 8, in dinner session at the Old South with Mrs. Martin Heidgen as hostess.

Mrs. Brooks Teeter, President, presided over the business. The group discussed the establishment of a Student Nurses' Loan Fund and voted to sponsor such a fund.

Ten members attended the meeting.

Mrs. Max J. Mobley
Publicity Secretary.

Mrs. A. A. Little, Texarkana, President of the Woman's Auxiliary, Arkansas Medical Society, was honor guest at the February luncheon meeting of the Sebastian County Auxiliary Monday noon at the Old South.

The state president reported on a conference of presidents and presidents-elect of the Women's Auxiliary to the American Medical Association she attended in Chicago in December. She said the meeting was devoted principally to a discussion of organization problems and to the part a physician's wife can play in furthering the success of her husband in his profession. General theme of the conference was, "Our World, a Better Goal," she explained.

Hostesses for the luncheon, for which there were 25 members and two guests present, were Mrs. Bob Thompson and Mrs. E. Z. Hornberger.

Mrs. Louis O. Lambiotte
Publicity Chairman.

ANNUAL COMMITTEE REPORTS PUBLIC RELATIONS

DALE ALFORD, Chairman

The Public Relations Committee held its first organizational meeting in Little Rock in May, 1952. This was a successful meeting which brought together members of the committee, State Society officers and the field representative of the Public Relations Department of the American Medical Association. An outline of the year's work was drawn up based upon the consideration that no funds were available to the committee for use in their program. Nevertheless, it was the decision of the committee to accomplish the following goals: (1) The activation of the Professional Relations Committee of the State Medical Society with more emphasis on the Professional Relations Committees of the various component societies. (2) Increased emphasis on the Physician Place-

ment Plan. (3) To request organization and appointment of Public Relations Committees in the various county societies. (4) Send as many physicians as possible to the Public Relations Institute of the American Medical Association in Chicago. (5) To assist the various committees of the State Society in every way possible, which the committee feels is a function of the Public Relations Committee. (6) To encourage all medical societies to co-operate with the press, radio, schools and, in each case, assume the role of leadership in matters pertaining to the public health.

The Public Relations Committee is proud to report that five representatives of the Arkansas Medical Society attended the Public Relations Institute of the American Medical Association held at the Edgewater Beach Hotel, Chicago, September, 1952.

With the experience gained by the members of the committee at Chicago the decision was made to hold Arkansas' first Public Relations Institute in Little Rock. Our first annual Public Relations Institute was a huge success with more than 80 physicians throughout the state being present and all of the various component societies having representation, as well as the Ladies Auxiliary and various hospitals and health agencies. It is the recommendation of the committee that this Public Relations Institute be continued as an annual affair with emphasis upon the type of program that is deemed most urgent at that time. The Public Relations Institute at Little Rock had many outstanding speakers including former Governor Keen Johnson of Kentucky, vice president of Reynolds Metals Company, John Bach, Press Relations Director of the American Medical Association, Mrs. Louis Hundley, Public Relations Chairman of the Auxiliary of the American Medical Association, and the Editors of the Arkansas Gazette and Arkansas Democrat. Radio was ably represented by Mr. Doug Romine of Radio Station KARK. Dr. W. R. Alstadt, a trustee of the American Dental Association, represented the Dental Profession. Also, other outstanding physicians contributed to the program.

Numerous newspaper articles have appeared in the state's leading daily newspapers as well as in other local papers. These articles have, in most instances, been initiated and are contributed to by the several members of the Public Relations Committee and our capable State Society Executive Secretary.

The committee is indebted to the officers of the State Society and to the Public Relations Chairmen of the various County Societies for their splendid cooperation. It is felt that in the future the Public Relations Committee of our Society will

become one of its most active and useful channels for the building of good will in our profession, in our relations with our patients, and with all agencies interested in the health welfare of our state.

ARKANSAS STATE BOARD OF HEALTH

J. T. HERRON

State Health Officer

The Bureau of Local Health Service operated in 1952 on about the same level as the previous year. Judged by any standard, local health services in the State of Arkansas are woefully inadequate. This is due primarily to two reasons:

1. There is a definite shortage of personnel.
2. The salary range for the various positions in public health is too low to attract and hold competent personnel.

We still have need for about twenty-five qualified local health officers and about two hundred to two hundred and fifty public health nurses.

Federal assistance for health services in Arkansas has been reduced considerably during the last three years and if we are to maintain our present level, and certainly if we expect to offer anywhere near an adequate program, the state and local units of government will have to bear a larger share of the cost. In spite of personnel shortages local health departments have made some progress in public health but the total local health program still falls far short of being adequate.

The Arkansas State Medical Society and its physician members are obviously interested in the improvement of rural health services as evidenced by their participation and planning for the state-wide Rural Health Conference.

During 1952, as in past years the health department conducted several health work shops, offered health courses in a number of the colleges, distributed thousands of pamphlets, circulated about five thousand health films, prepared several radio programs, and served generally as information bureau.

The downward trend in the incidence of typhoid fever was interrupted in 1952 by a sudden increase in this disease. After a 15-year trend downward this upswing gives us some concern but also makes us realize that the fight against this disease cannot be relaxed. One bright spot in this situation is that more sources of infection, that is, chronic typhoid carriers, were discovered and placed under modified quarantine than in any previous year. Twenty-three carriers were added to the list in 1952.

Rabies in animals, particularly in the domestic dog, has been a most troublesome problem. The services of a public health veterinarian on the state health department staff is badly needed.

Poliomyelitis occurred less frequently than in 1951 and in Arkansas remains a disease predominantly of young children.

Another year has passed with no case of smallpox being reported for a total of four years without cases of this disease.

No proven local transmission of malaria has occurred. A great many returned Korean veterans have had vivax malaria.

Survey chest X-rays numbering 165,000 were made during 1952. Approximately 2,000 of these individuals were referred to their family physicians because of suspicious findings. An X-ray report on each was sent to their respective private physician. Approximately 450 cases of tuberculosis were originally found and diagnosed as a result of this survey activity. Approximately 1,800 cases of

tuberculosis first discovered during 1952 have been reported. Quarterly listings on over 10,000 known tuberculars are sent to the local health departments to aid in keeping these patients under competent medical supervision. Analyses show that 1,129 known cases needing supervision are at home against medical advice and that over 200 of these have a **positive sputum**. A special place for commitment of these recalcitrants is urgently needed. Vaccination with B. C. G. has been instituted on patients in the State Hospital, students in all the schools of nursing in the state, and freshmen medical students.

The steady decline in venereal disease rates which began with the advent of penicillin in 1945, has continued through 1952 and is the result of continuous application of effective contact investigation and treatment of diagnosed cases. Surveys of selected groups are still highly profitable as demonstrated by the 9 per cent positivity rate among 14,532 welfare clients examined during the year. Increasing emphasis was placed upon the rapid investigation of infectious syphilis cases which were reduced in number from 490 in 1951 to 170 in 1952. During the coming year, the present methods and efforts will continue undiminished and increasing emphasis will be placed upon gonorrhea control.

Emphasis on maternity and newborn nursing care at staff education conferences for public health nurses during the year, was a major factor in increasing knowledge for improved preventive care among mothers and babies. Public health nurses made 45,104 home and office visits to maternity patients, infants, and pre-school children. Consultants supervised 50,272 hearing and vision tests of school children in 29 counties during the 1951-52 school year. Varied health services to school children was provided in 45,233 instances through health units. Two workshops on school health—one each for white and negro—were sponsored by the state health department and the state department of education. More than 300 representatives from state-wide education and health fields, attended, including representatives of the State Medical and State Dental Societies and representatives of the medical and dental auxiliaries. These annual workshops are conducted by prominent health education leaders and are designed to acquaint the participants with workable methods for improving health service in their local schools.

The nutrition service of the State Health Department in 1952 revised the Arkansas Diet Manual and made it available to doctors and hospitals throughout the state. They sponsored, along with the Arkansas League for Nursing and the Arkansas Dietetic Association, a two-day work conference on "Diet Therapy Instruction in Schools of Nursing". A one-day Food Managers Conference was held for dietary employees of hospitals in Southwest Arkansas. In cooperation with the Arkansas Dental Association, the leaflet, "Your Teeth and Your Food," was written and published. Other leaflets included "What to Eat When Meat Prices Are High" and "Feeding Your Baby."

The major activities of the Industrial Hygiene Division of the State Health Department were devoted to field investigations of industry in order to bring the benefit of health services directly to the industrial worker. Technical field studies included a dust study of the coal mines and brick plants, fluoride studies, and a study of X-ray shoe-fitting machines. Educational activities included a monthly Industrial Hygiene News section of the State Health

urged to report regularly to his private physician for periodic check-ups.

During the year 1952 approximately \$5,500,000 were expended by the communities of the state in the construction of new, and improving old water and sewerage systems. Included in the above improvements and construction were four new water systems, five modern sewage treatment plants, and three swimming pools. Eighty-three sets of engineering plans were reviewed for approval for proposed water and sewerage improvements that were estimated to cost approximately \$6,000,000. The 202 public water systems serve a population of 780,000; these systems were periodically inspected. Fluoridation treatment was provided in four systems this year.

Four public hearings were conducted on the problem of salt water pollution of streams, and oil companies responsible for such pollutions were ordered to correct the hazard. Stream pollution surveys were conducted on the Arkansas and Ouachita Rivers.

Surveys were conducted, with the aid of the mobile laboratory to evaluate the efficiency of the treatment processes, at the following sewage treatment plants: Jonesboro, Stuttgart, Siloam Springs, Marianna, Newport, Benton, Eureka Springs, Gentry, Forrest City, Paragould, Hot Springs, Bentonville, Gravette.

Investigations were made of fourteen out-of-state milk supplies to determine if effective sanitary measures were being carried out in those areas having a permit to sell milk in Arkansas. Nineteen surveys were made of milk supplies in as many cities to determine compliance with the state law. Seventeen investigations were made of milk for interstate carriers. Plans were approved for four new pasteurization plants. Three of these plants were completed. Seven hundred and fourteen new dairy barns were constructed in accordance with plans approved by the state health department. Two new milk laboratories were established in the state, and five more are under consideration.

The necessity for more careful supervision of the manufacture of dairy products has become greater because of the marked expansion of the various branches of the dairy industry. A rigid sanitary inspection of creameries, cheese factories, condenseries, condensery depots, ice cream plants, counter freezers and cream stations has been carried out. During the past year a total of 21 cases based on violations of the regulations and the Arkansas Dairy Law were referred to prosecuting attorneys. A total of 2,028 gallons of frozen desserts were seized and destroyed under the supervision of the state health department. Warnings were sent to several ice cream plants concerning the substitution of vegetable fat for butterfat in the manufacture of frozen desserts. With imitations growing into giant competitors for dairy products, the question of how best to cope with the problem is one of the foremost issues facing the department during the coming year.

Investigations of numerous products by the State Health Department resulted in the removal of many fraudulent and harmful proprietary remedies from the market. Many inspections of canning and other food processing plants were made during the past year. The inspection program in poultry dressing plants and slaughter houses was stressed and considerable improvement was noted. In the educational field, health department personnel served as in-

structors in several foodhandler schools in various cities of the state and served as guest lecturers on the topic of Food Sanitation at four of the colleges. During the past year several hundred samples were analyzed by the Bulletin. A series entitled, "Health Problems of the Industrial Worker," pointed out occupational hazards found in the working environment. The industrial worker is being Food & Drug Laboratory—approximately 17% of these samples proved to be violative. A large quantity of food and food products unfit for human consumption was voluntarily destroyed under the supervision of this division.

Improving family and community health through public health nursing services has been the keynote of effort throughout 1952. It has been implemented through closer working relationships with physicians and community agencies and emphasized in the staff education program for public health nurses. Local physicians have participated in this program. There is a continued need for the training and employment of qualified nursing personnel. Problems in recruiting nurses are the competition of higher salaries in other nursing fields, costs of the car required for her day by day work and the general shortage of nurses in the state. The physicians of the state and the state health department are working diligently in supporting and assisting in the plants for the University of Arkansas Medical Center School of Nursing.

In accordance with the State Plumbing Law (Act 200 of 1951), a State Plumbing Code setting forth the minimum standards on plumbing material and installations was prepared. Copies of the code have been distributed to all cities of the first and second class, and licensed Master and Journeyman Plumbers early in the year. The licensing program was actively pursued and, at present, most of the persons engaged in the business of plumbing have been licensed by the State Board of Health. Inspectors have made a large number of inspections of plumbing installations all over the state. The results of this phase of the program is beginning to bear fruit and there is a noticeable improvement in the quality of plumbing work that is being done. Considerable effort has been made to assist and encourage the cities to set up a plumbing inspection program at the local level. A suggested ordinance that could be used by cities in setting up a plumbing program was prepared and distributed to cities throughout the state.

During the year 1952 the State Hygienic Laboratory continued performing laboratory diagnosis of communicable diseases for private physicians and the various divisions of the State Health Department. In addition, analytical procedures were performed in the control of environmental hazards such as water supplies, food and drug, water pollution, and veterinary medicine. Typhoid vaccine was manufactured for distribution to physicians and local health departments without cost to either. Examinations of sputum specimens for tubercle bacilli is also offered the physicians of the state. In 1953 the Hygienic Laboratory will improve its services by doing one additional standard test for syphilis, the Venereal Disease Research Laboratory Test, on all blood Wassermann specimens and by culturing for Brucella the clots of all blood specimens submitted for febrile agglutinations which show any reaction with the Brucella antigens. Blood clot cultures for the typhoid bacillus and other salmonella will be continued on all specimens showing any agglutination with typhoid or paratyphoid antigens.

February 6, 1953.

REPORT OF

ARKANSAS STATE CANCER COMMISSION

FOR THE YEAR 1952

DR. CARL A. ROSENBAUM

Secretary and Medical Director

The program of the Arkansas State Cancer Commission during the year 1952 focused on case finding, diagnosis and treatment for indigent cancer patients, marked by better coordination of services available.

Established as the official state agency responsible for the cancer control program in Arkansas, created by Act 277 of the 1945 General Assembly, the State Cancer Commission will conclude its eighth year, June 30, 1953.

During the fiscal year, July 1, 1951-June 30, 1952, there were 1,808 patients benefiting by direct expenditure for hospitalization and/or related services of the State Cancer Commission.

All of Arkansas's 75 counties are represented in the 1,808 patients, with 1,216 new patients.

Analyses of hospitalization and related services provided for State Cancer Commission patients during the fiscal year present the following pictures:

Hospitalization			
Patients Receiving Services	Requests Processed	Requests Paid	Admissions to Hospitals
592	1,246	847	651

State appropriated funds paid per diem hospitalization, and federal grant-in-aid funds paid for diagnostic hospitalization and procedures.

Domiciliary Care			
Patients Receiving Service	Requests Processed	Requests Paid	
261	526	516	

Funds of the Arkansas Division, American Cancer Society, administered by the State Cancer Commission, paid per diem domiciliary care.

RADIOACTIVE THERAPY

Radioactive materials were provided by the State Cancer Commission for six patients, four males and two females, at University Hospital Tumor Clinic. Three of these with diagnosis of carcinoma of thyroid gland received radioactive iodine; two suffering from polycythemia vera received phosphorus; and one diagnosed as adenocarcinoma of the ovary received radioactive gold.

CENTRAL CANCER REGISTRY

The Central Cancer Registry, housed at University of Arkansas School of Medicine and staffed by State Cancer Commission personnel, provided **statistical data** regarding incidence, prevalence and mortality rates of cancer by site, pathological type, age, sex, occupation and other pertinent variables.

Serving as an **administrative tool** in the program of service to the cancer patient, the Central Cancer Registry includes Tumor Records abstracted from case histories of cancer patients admitted to the seven Tumor Clinics in the state, mortality reports from the Bureau of Vital Statistics of the State Health Department, and reports from out-of-state cancer registries.

Tumor Records received in the Central Registry are processed and coded for transfer of information to punch cards. The final phase of this procedure is to begin when adequate financial assistance and personnel are available.

Information on cancer of the colon and rectum, cancer of the breast, Marjolin's ulcer, and cancer of the stomach was prepared for doctors to be used in connection with papers read before the Arkansas Post-Graduate School of Surgeons, Arkansas Medical Society, and the American College of Surgeons; information on admissions by years, 1947 through 1952, by site of lesion, sex, color, and age at University Hospital Tumor Clinic, the state's largest; and information for a training meeting, sponsored by the Arkansas Division, American Cancer Society.

Statistical and educational services of the Central Cancer Registry are available to members of the medical profession upon request.

Since follow-up ranks third in importance in the saving of a cancer patient's life, much time is devoted to this phase of the program in the Central Cancer Registry.

An effective system of follow-up reports the current status of the patients at regular specified intervals and indicates the need for further treatment. Follow-up is carried on by the Tumor Clinic Secretaries at the Seven Tumor Clinics by letters to patients, relatives, friends, doctors, welfare and social workers, mortuaries, etc. When such media are unsuccessful a request for follow-up is made to the public health nurse through the State Health Department. All information is correlated in the Central Cancer Registry.

Follow-up has been successful with 97.5 per cent of the 4,441 patients recorded in the Central Cancer Registry, leaving only 62 patients untraced.

SEVEN TUMOR CLINICS

Arkansas's seven Tumor Clinics, designated by the State Cancer Commission as being qualified for and as having adequate facilities for the diagnosis and treatment of cancer, continue to hold American College of Surgeons approval.

Number of Cancer Patients Admitted to Arkansas Tumor Clinics

By Sex and Color

January 1, 1947—September 30, 1952

Tumor Clinic	Male		Female		Total No. Pa'ts.
	W.	C.	W.	C.	
Bowie-Miller Counties (Texarkana)	40	3	54	39	136
Sebastian County (Fort Smith)	75	1	77	1	154
South Arkansas (El Dorado)	58	17	46	72	193
Northeast Arkansas (Jonesboro)	122	10	183	49	364
Southeast Arkansas (Pine Bluff)	83	50	138	209	480
St. Vincent Infirmary (Little Rock)	238	7	332	12	589
University Hospital (Little Rock)	972	366	907	709	2,954
TOTAL	1,588	454	1,737	1,091	4,870

PROFESSIONAL EDUCATION

Clinical and statistical studies and consultative services derived through the seven Tumor Clinics not only benefit the cancer patient but the doctor concerned. The pursuit of new knowledge by the profession is a fundamental reason for the clinic's existence. This is a part of the professional education program, sponsored by the State Cancer Commission.

During the year 275 doctors participated in the program of the State Cancer Commission, on a volunteer basis, serving on Tumor Clinic staffs or by referral of patients. Of this total 73 participated for the first time.

The Association of Tumor Clinic Staff Members in Arkansas, organized in March, 1949, held a joint session with the Union County Medical Society, meeting at El Dorado in May, 1952, sponsored by the South Arkansas Tumor Clinic, El Dorado. Specialists from Alabama presented papers on "Brain Tumors" and "Bone Tumors," with Little Rock doctors, discussants.

* * *

Significant trends are evident at the conclusion of the seventh year of the cancer control program. Patients are presenting themselves at the Tumor Clinics earlier for diagnosis and treatment of suspicious lesions and symptoms. Patients are demonstrating more cooperative and intelligent understanding with regard to their follow-up visits and reports to the Tumor Clinics.

Only intensive and stimulated cancer research can provide improved treatment methods to push cancer from second place in mortality reports.

REPORT OF THE RURAL HEALTH COMMITTEE

DR. H. ELVIN SHUFFIELD
Chairman

This committee regrets to announce the resignation of Dr. Arnold Henry of Russellville. He has led this committee in a very able manner and helped to establish one of the most outstanding Rural Health Conferences in the United States. Arkansas Rural Health Conference had the largest attendance, including the National Rural Health Conference, of any of these conferences.

GOALS FOR THE RURAL HEALTH COMMITTEE

- (1) To better health conditions in rural Arkansas.
- (2) To study the problems of rural health with the rural people themselves; and to acquaint ourselves with the needs of rural health in Arkansas as they exist today.
- (3) To affiliate the State Medical Society with the organized and powerful farm groups.
- (4) To organize and develop a rural health conference for Arkansas.
- (5) To attempt to better public relations between the State Medical Society and the people of Arkansas.

ACTIVITIES OF THE RURAL HEALTH COMMITTEE

This committee had several meetings throughout 1952 and 1953 and was very ably assisted by its co-sponsors, The Arkansas Dental Association, The Arkansas Farm Bureau Federation, Agriculture Extension Service, University of Arkansas, Women's Auxiliary of the Arkansas Medical Society, Arkansas Council of Home Demonstration Clubs. Dr. S. A. Drennen, Dr. Charles R. Henry, and Mr. Aubrey Gates have rendered very excellent and wise services to this committee. We have also had the excellent cooperation, guidance, and assistance from the following: Mr. Waldo Frazier, Executive Secretary of the Arkansas Farm Bureau Federation, Miss Helen Robinson of the Extension Service, Mrs. Hazel Jordan of the Extension Service, Mrs. Mason J. Lawson, Mr. Austin Vines, Associate Director of Agricultural Extension Service, University of Arkansas, Mr. Kenneth C. Bates, Assistant Director of Agricultural Extension Service, Mrs. Gordon P. Oates, President of the Woman's Auxiliary, Arkansas Medical Society, Mrs. J. B.

Crawford, Chairman of the Rural Health Committee, Woman's Auxiliary of the Arkansas Medical Society, Dr. W. R. Alstadt, D. D. S., Arkansas State Dental Association, Dr. Maurice J. Friedman, D. D. S., Arkansas State Dental Association, Dr. Bryant B. Pake, D. D. S., Arkansas State Dental Association, Dr. John T. Herron, M. D., State Health Officer, and Mrs. W. W. Grunden, President, Arkansas Council Home Demonstration Clubs. Throughout the year, there was very excellent attendance on the part of the Rural Health Committee and its advisory committee, and the plans for the Second Arkansas Rural Health Conference were drawn and this Conference was held at the Hotel Marion in Little Rock, Arkansas, on Thursday and Friday, August 7 and 8, 1952. We had over 600 people to register and a very excellent program was presented, which consisted of the following:

Address of Welcome

S. A. Drennen, M. D., President, Arkansas Medical Society.

F. S. Crockett, M. D., Chairman, Rural Health.

Panel—"Are We Meeting the Problems of Health Personnel?"

Charles Reid Henry, M. D., Moderator.

"How Will a Medical Center Serve Rural Arkansas?"

Hayden Nicholson, M. D., Dean, University of Arkansas School of Medicine, Little Rock, Arkansas.

"The Problems of Operating a Small Community Hospital."

Eugene Lopez, Hospital Administrator, Methodist Community Hospital, Paragould, Arkansas.

"Nursing Service in Arkansas"

Mrs. Catherine Hockaday, R. N., President Arkansas Nurses Association, Pine Bluff, Arkansas.

"Dental Service in a Rural Community"

David Brock, D. D. S., Chairman, Council on Dental Health, American Dental Association, St. Louis, Missouri.

Group Discussion and Question Period

Paul A. Miller, Rural Sociologist, Agricultural Extension Service, Michigan State College, East Lansing, Michigan.

"Am I My Brother's Keeper?"

Mrs. Charles W. Sewell, Former Director, Associated Women, American Farm Bureau Federation, Otterbien, Indiana.

"It's Every Man's Job"

F. J. L. Blassingame, M. D., Board of Trustees, American Medical Association, Wharton, Texas.

"What We Expect From Health Personnel in Our Community"

Mr. R. H. Smith, Walnut Ridge, Arkansas.

Mrs. W. W. Grunden, Jonesboro, Arkansas.

"The Practice of Medicine and Its Problems in a Small Community"

B. N. Saltzman, Mountain Home, Arkansas.

Panel—"This We Have Done"

Jackson County Health Council Goes to Work.

Lawrence County Investigates Its Water Supply.

Hempstead County Gets a Hospital.

Newton County Gets a Doctor.

Sebastian County Takes Community Health Inventories.

Discussion and Question Period

Paul A. Miller, Rural Sociologist, Agricultural Extension Service, Michigan State College, East Lansing, Michigan.

Closing Remarks

S. A. Drennen, M. D., President, Arkansas Medical Society.

This Conference received very excellent publicity through the coverage of the Arkansas Gazette and the Arkansas Democrat, and in addition to this, Mr. Doug Romine of KARK made tape recordings of outstanding talks and presented them over KARK, KLRA, KXLR, KGHI, and KVLC gave excellent radio coverage.

Those people who attended the Conference took a very active part during the discussion period without any encouragement whatsoever and they seemed to genuinely enjoy every minute of it and took a very keen interest in their problems.

At the last meeting of the Conference, a vote was put to the people as to whether the Rural Health Conferences should continue as an annual affair, and by a very popular majority, the people voted that this should be done.

A scientific exhibit was set up in the small Ball Room at Hotel Marion and the following were exhibited or distributed:

Model of New University of Arkansas Medical School.

State Health Department, Sanitary Water Supply.

Arkansas State Dental Association, Fluorination of Water.

American Medical Association, "How Safe Is Your Home?"

Medical Technicians.

Blue Cross-Blue Shield.

Farm Bureau Federation.

Leaflets on Rural Health.

Leaflets on Chronic Illness.

The Rural Health Committee has already made plans for the third Arkansas Rural Health Conference, which will meet at the Hotel Marion in Little Rock, Arkansas, at 9 a.m., Tuesday, August 4, 1953, and continue through until noon Wednesday, August 5, 1953. As soon as the complete program has been worked out, it will be given publicity in the State Journal and various newspapers and radios about the State.

RESULTS OF THE RURAL HEALTH COMMITTEE 1952-53

- (1) The organization of a very successful Rural Health Conference for Arkansas and the establishment of this as a yearly event.
- (2) The creation and stimulation of interest in Rural Health Problems in Arkansas.
- (3) A program for rural health for Arkansas with an attempt to educate the individual members of the Medical Society to this program.
- (4) Obtaining the support, interest, and friendship of the following powerful farm and professional organizations in the State of Arkansas: (1) The Agricultural Extension Service, University of Arkansas. This includes the Home Demonstration Agents and the Farm Agents who are located in every county of Arkansas. (2) The backing of the Arkansas Farm Bureau Federation. (3) The support of the Arkansas Council, Home Demonstration Clubs. (4) The close support of the Arkansas State Dental Association. (5) An increased interest in Rural Health Problems by the Woman's Auxiliary to the Arkansas Medical Society.
- (5) The stimulation of interest in the establishment of an increased number of Health Councils in Arkansas.
- (6) Creating an interest within the State Medical Society, and a sense of responsibility of the State Medical Society for the Rural Health of Arkansas. It is hoped that this stimulation of interest will carry on for many years to come, and will result in a very de-

finite improvement of Rural Health in Arkansas.

(7) Plans for the Third Arkansas Rural Health Conference.

(8) It is felt that through activities of the Rural Health Committee and chiefly through its Rural Health Conference that a great deal of good public relations was obtained between the people of Arkansas, especially the rural people and the State Medical Society.

It is felt that this public relations aspect of the Rural Health Conference has done more to benefit the State Medical Society than any other single program that the State Society has attempted.

In conclusion, I would like to humbly suggest that the House of Delegates notify the membership that this Committee and the Arkansas Rural Health Conference are a direct off-spring and responsibility of the Arkansas Medical Society. At the last meeting, only 47 doctors took time to attend and register, and it is my opinion that if we do not show more interest, cooperation, and leadership, we are going to lose numerous friends who are willing to join us in fights for us. A number of doctors have stated that they did not know they were supposed to attend this Conference. I would like to suggest that all of us should take more time with our mail from the Councilors and Executive Secretary's office, because announcements were sent to each doctor from these two sources.

I would like to especially thank Dr. John T. Herron for his cooperation in furnishing scientific exhibits for the little Ball Room in the Marion Hotel.

I would like to make special acknowledgment of the very excellent guidance and assistance of Dr. S. A. Drennen, Dr. Charles R. Henry, Mr. Aubrey Gates, Mr. Waldo Frasier, Miss Helen Robinson, Mrs. Hazel Jordan, Mrs. Mason Lawson, Mrs. J. B. Crawford, Mr. Paul C. Schaefer, Dr. W. R. Armstedt, Dr. Maurice Friedman, Dr. Byron B. Pake, Mrs. W. W. Grundon, and to the individual members of the Rural Health Conference whose great sacrifice, work, and assistance have made the work of the Rural Health Committee a very outstanding success during the past year.

REPORT OF THE EXECUTIVE SECRETARY

PAUL C. SCHAEFER, Executive Secretary

During 1952 your headquarters enlarged the scope of every phase of its activities.

Public Relations, under the leadership of Dr. Dale Alford and the committee, became an important part of the daily activities of the Executive Secretary. Physicians Placement Service, Grievance Committees and the Public Relations Institute proved effective tools in establishing the foundation of a realistic Public Relations Program based on a sound appraisal of budget limitations. 333 column inches of newspaper publicity was given the establishment of Councilor District Grievance Committees. 37 newspapers carried the Society's news release announcing the committee appointments.

Paid membership in the Society rose from 1,049 in 1951 to 1,094 in the current year. There are 80 Life Members and 46 Affiliate Members comprising a total of 1,220. Of that number, 885 members paid AMA dues. 12 Affiliate and 15 Life Members were eligible for AMA Membership. The 912 AMA Members from this society are not enough to qualify us for the two-delegate representation which we have enjoyed in the past, however, it is an improvement over the 803 AMA members listed from Arkansas in the previous year.

Record-keeping methods in the headquarters were further improved making our information more accurate and up-to-date.

Over 22,000 pieces of mail were dispatched from the headquarter offices in the last year.

At the suggestion of the Council another employee was added to the staff, making possible the increased activities of the Executive Secretary.

The Executive Secretary spent a great deal of time at the Legislature during its 1953 session assisting the Legislative Committee in their successful effort to obtain funds for the construction and operation of the Medical Center. In future legislative years the Executive Secretary plans to take an increasingly active part in legislative sessions.

A smooth transfer of responsibility was achieved by J. J. Monfort upon taking office as secretary in September, 1953. He assumed supervision without any disruption of established practices and routines.

The cooperation, confidence and assistance of the officers, members of the Council and other members of the Society is deeply appreciated.

COMMITTEE FOR THE IMPROVEMENT OF NURSING SERVICE

M. C. HAWKINS, JR., M.D., Chairman

On August 28, 1952, the problems concerning the nurse shortage in Arkansas and suggestions for the improvement of this situation were outlined in a communication in writing from me to the executive secretary of the Arkansas State Medical Society and the executive secretary of the Kansas Medical Society, to be considered at a meeting between the Kansas nurses and representatives of fifteen mid-western state medical societies.

On September 28, 1952, the above referred to meeting was held, at which time plans were formulated for the meeting of representative groups from the nurses association and the hospitals in the various states to discuss, (1) Problems of nurse education; (2) Whether the first training course can be standardized so that it will complete the education for a general duty nurse or a practical registered nurse, or by whatever title this degree of training may be recognized, and that this first years' training may subsequently be applied toward education for the degree of registered nurse; (3) the problem of reciprocity on this basis among the fourteen Mid-western states represented; (4) to report the results of such discussions to the next meeting of this conference (conference tentatively scheduled for January, 1953). Final report of this committee is planned following the outcome of the last mentioned planned meeting.

During the year the Hawkins Clinic sponsored an enrollment program for nurses and obtained radio and newspaper time for the project.

REPRESENTATIVE TO THE ARKANSAS STATE DENTAL ASSOCIATION

JOHN E. GREUTER

No problems have arisen in the past year necessitating any action between the Arkansas Dental Association and the Arkansas Medical Society.

COMMITTEE ON LIAISON WITH ARKANSAS STATE BOARD OF HEALTH

HOYT R. ALLEN, Chairman

We have not had anything to come up before this Committee, therefore, we do not have anything to report.

COMMITTEE ON REVISION OF THE CONSTITUTION

J. J. MONFORT, Chairman

Your committee, after extensive correspondence, met in Fort Smith on February 15th and agreed that the following changes in the Constitution and By-Laws of this society be recommended to the House of Delegates.

1. In Article IV (Composition of the Society), add Section 5 to read as follows:

Military Members. Regular members of the Arkansas Medical Society who are in the service of the Armed Forces of the United States not as career officers may be classified as Military Members, and carried on the rolls of their respective County Societies, as such. Military members shall have a waiver of dues during the time of service, provided that they are in good standing at the time they entered the Armed Forces.

2. In Article V (House of Delegates) add the words "First Vice-President" after the word president. This change will make the first vice-president an ex-officio member of the House of Delegates.
3. Delete the present Article VI and substitute the following:

The Council shall consist of the Councilors, the President, First Vice-President, President-Elect, Secretary and the Treasurer. The Speaker and Vice-Speaker of the House of Delegates, Past Presidents, and Vice Councilors shall be members ex-officio without vote. Besides its duties mentioned in the By-Laws, the Council shall constitute the Finance Committee of the House of Delegates. A majority of the voting members shall constitute a quorum, in which consideration a Vice-Councilor acts and votes as a Councilor if the Councilor is not present.

4. Change Article VIII (Sessions and Meetings), to read as follows:

Section 1. The Society shall hold an annual session beginning the third Monday in April of each year, during which there shall be held daily general meetings, which shall be open to all registered members and guests.

Section 2. The place for holding each annual session shall be decided by the House of Delegates.

5. (A) Article X (Funds and Expenses), correct typographical error; \$5.00 should read \$25.00.

(B) Add: "New members, and Military members just returning from service, who are accepted for regular membership after July 1 of each year, are required to pay only one-half of the annual assessment."

(C) Substitute the word "Council" for the words "Finance Committee" in the last sentence of the present second paragraph.

6. In Article XIII (Amendments), delete the words "or sent officially to each component society at least two months before the meeting at which final action is to be taken."
7. In Chapter II, Section 1 of the By-Laws delete the words "Time and." This directs the House of Delegates to set the place of meeting of the next annual session.

8. In Chapter II add: "Section 3. In the event the previously selected place is unable to be host to the annual session, the meeting place may then be designated by the Council."

9. Chapter V (Election of Officers) Add: "Section 1, (a) In the event of the death or removal of the President-Elect, the nominating committee at the next annual session shall present nominees for President and President-Elect in addition to the other officers."

10. Chapter V, Section 3, delete the last sentence and substitute the following:

In the event of the President's inability to serve, the first vice-president shall serve in his stead.

11. Chapter VIII (Committees) Change Section 1 to read: "The standing committees of this Society shall be as follows:

1. Committee on Cancer Control.
2. Committee on Medical Legislation.
3. Committee on Public Health (Liaison with Public Health Department, Rural Health, Maternal Welfare, Tuberculosis, Heart Association, and, etc.)
4. Committee on Medical Education (Medical School and Post-Graduate work).
5. Committee on Hospitals (Blue Cross, Hospital Liaison and Arkansas Hospital Association.)
6. Committee on Public Relations (Speakers Bureau, Publications & etc., Liaison with Auxiliary, Veterans Administration, Civilian Defense and etc.)
7. Committee on Scientific Work and Exhibits (Scientific Program for annual session).
8. Committee on Arrangements for Annual Session (to work with local hosts committee on annual session arrangements for hotel, golf, public gatherings, and etc.)"

Section 1 (a) Additional Committees shall be considered sub-committees of the appropriate standing committee and one member of the standing committee shall be a member of the sub-committee.

Section 1 (b) Unless otherwise provided, these committees shall be appointed by the President for three-year staggered terms. The committees shall consist of not less than six members each, with each president appointing two members for a three-year period. Any vacancies through death, removal or resignation may be filled by the President at the time the vacancy occurs and for the unexpired term of the vacancy. The President and Secretary shall be ex-officio members of all committees.

12. Insert Section 2 to read:

The Cancer Control Committee of the Arkansas Medical Society shall represent the Society in all activities concerned with cancer in the state, shall directly supervise the activities of the Cancer Control Committee of the Woman's Auxiliary to the Arkansas Medical Society and shall cooperate with all agencies within the State of Arkansas dedicated to the problem of cancer.

13. The present section "2" (Committee on Scientific Work) to be numbered Section "3." The word "six" shall be substituted for the word "three" therein.
14. Present Section "3" (Medical Legislation) to be numbered Section "4" and the first two sentences deleted, to be replaced by the words: "The committee on Medical Legislation shall represent the society in all legislative practice."
15. Present Section "4" (Committee on Health and Public Instruction) to be numbered Section "5."

16. Present Section "5" (Committee on Medical Education and Hospitals) to be numbered Section "6" and the words "and hospitals" be deleted after the words "medical education" in the first sentence. Also delete the words "hospitals and" following the words "pertaining to" in the first sentence of this section. Add words "and Post-graduate Instruction" at end of first sentence. In the second sentence of the section add the words "and Arkansas Academy of General Practice" after the words "Arkansas School of Medicine."
17. Section 7 shall read: The Committee on Hospitals shall have referred to it all questions pertaining to hospitals and their operation; hospitalization of patients, hospital and health insurance, hospital-physician relationships, and shall function as liaison with the Blue Cross-Blue Shield and Arkansas Hospital Association.
18. The present Section "6" (Committee on Public Relations) to be numbered Section "7." Add "The subcommittee on Professional Relations shall function under this committee."
19. Section "8" amended to read:
"The committee of Scientific works and Exhibits shall determine the character and scope of the scientific proceedings of each Annual Session. It shall prepare a scientific program for each annual session. It shall solicit and collect material from institutions and individual physicians of the state that is of scientific interest. This it shall arrange and exhibit at each annual session. It should particularly strive to obtain material that will more fully illustrate the papers presented in the general meetings of the society.
20. Chapter VIII, Section 9 to be amended to read: The Committee on Arrangements for the annual session shall provide suitable accommodations for the meeting places of the Society and the House of Delegates, the scientific exhibit, the committees, and shall have general charge of all arrangements. Its chairman shall report an outline of the arrangements to the Secretary for publication in the program and shall make additional announcements during the session as occasion may require.
21. In Chapter IX (County Societies) Section 6, insert the words "except that" after "decision shall be final," continuing the sentence with "a county Society shall at all times, etc. In the same sentence delete the words "Council of the State Society" and substitute therefor the words "House of Delegates of the Arkansas Medical Society."

BUDGET COMMITTEE

J. J. MONFORT, Chairman

The Budget Committee respectfully submits the following proposed budget for 1953:

INCOME

Dues 1,050 Members @ \$25.00.....	\$26,250.00
Journal Advertising	13,601.00
Interest on Bonds	250.00
Annual Session—Exhibit Booth Fund	1,344.00
\$5.00 Registration (Annual Session)	2,100.00
A.M.A. Reimbursement	200.00
	<hr/>
	\$43,745.00

EXPENSE

1. Salaries	\$11,450.00
2. Printing Journal	13,000.00
3. Travel & Convention	4,675.00
Telephone & Telegraph	950.00

4. Office Supplies & Expense.....	900.00
5. Postage	990.00
6. Dues & Subscriptions	150.00
7. Rent	600.00
8. Taxes	175.00
9. Contributions	250.00
10. Annual Session	3,400.00
11. Rural Health Committee	500.00
12. Public Relations Committee.....	1,200.00
13. Stationery & Printing	700.00
14. Auxiliary	1,100.00
15. Special Committees	120.00
16. Auditing	125.00
17. Miscellaneous	72.00
18. Bond Premiums & Insurance.....	55.00
19. Office Equipment	376.00
20. Reserve for Legal Services	2,000.00
	<hr/>
	\$42,788.00
Balance	<hr/>
	\$ 957.00

REPORT OF THE COMMITTEE ON MEDICAL EDUCATION

JEAN C. GLADDEN, Chairman

The Committee on Medical Education has consisted of the following members this past year: Dr. H. T. Smith, McGehee, Arkansas; Dr. John P. Price, Jr., Monticello, Arkansas; Isadore Meschan, Little Rock, Arkansas.

The Committee met at the Albert Pike Hotel, Little Rock, on October 26, 1952. Meeting with the committee were Dr. Joe Shuffield, Chairman of the Legislative Committee and Dr. John G. Watkins, Jr., a member of the Legislative Committee. The discussion of this meeting was concerning the advisability of requiring each medical



school graduate in the future to serve an accredited internship prior to receiving a license to practice in Arkansas. It was recommended at this meeting to refer the matter to the Council of the Arkansas Medical Society, with no other recommendations.

On January 25, 1953, the committee was present at a meeting with the Council of the Arkansas Medical Society and other members of the Medical Society, during which the Medical Center was discussed and at that time there was a unanimous vote among those present favoring the Medical Center.

In addition, the members of the Medical Education Committee were present at a combined Senate and House Committee Hearing at the Hotel Marion on the evening of February 3, 1953. At this time considerable discussion regarding the need and cost of the proposed Medical Center was carried out, most of which was favorable to the progress in construction of the Medical Center and its future operation.

REPORT OF THE ADVISOR TO THE STUDENT A.M.A. FROM THE ARKANSAS MEDICAL SOCIETY

A. J. TALBOT, Chairman

There were 180 members of the Arkansas Chapter of the Student A.M.A. in the past year.

Mr. Ewell Cochrane was president; W. R. Seibold, vice-president; John Watson, Secretary; Don Lovelace, Treasurer.

Meetings were held during the noon hour due to a full school curriculum.

The Arkansas Chapter sent three representatives to the National Student A.M.A. Convention where they actively participated in a move to try to establish a central agency for the handling of all applications for internships.

Future objectives of the Arkansas Chapter are:

1. To establish a closer relationship with the Arkansas Medical Society in order to learn more of its operation.
2. A membership drive is contemplated to encourage more of the Medical Student Body to participate in the program.
3. It is hoped to be able to arrange for time to include a Scientific Program in the future meetings.

COMMITTEE ON CANCER CONTROL

FRED HAMES, Chairman

There has been no formal meeting of the Committee on Cancer Control in the past year since, apparently, everything was moving along smoothly.

The only time that a meeting was possibly necessary was at the time Senate Bill Number 35 was introduced, but the time element was so short that we could not have gotten together. Therefore, no discussion of this took place since there had been no previous notice that the Bill was to be introduced.

COMMITTEE ON INDUSTRIAL HEALTH

LOUIS P. GOOD, Chairman

The Committee on Industrial Health wishes to make the following report:

1. Manufacturing and industrial plants in the State of Arkansas are in general small and the health of their employees in well looked after. The accident hazards are kept at a minimum by installation of modern machinery.

2. Health in the communities has been relatively good. During the past summer the water supply was low in several communities due to the drouth, but ways and means have been planned by the various communities to overcome this hazard in the State. Insofar as we have been able to ascertain, sewage is adequate.
3. In several communities schools are overcrowded, but plans are under way in several of the larger cities to construct new buildings and improve playground facilities for the children. This applies to both the white and colored schools.

COMMITTEE ON CHILD WELFARE

AUSTIN F. BARR, Chairman

Although no meeting of the Committee has been held, and nothing has been brought to the attention of the Committee, all members have been contacted and the following recommendations are submitted to the Arkansas Medical Society.

1. More thorough immunizations against all preventable diseases.
2. Determine and establish the elements of an adequate Child Welfare Program.
3. Determine the Child Welfare problems in Arkansas.
4. The coordination of all agencies offering aid to children, to obtain better results.
5. More adequate supervisions of school health programs.
6. Study of adoption procedures and practices in Arkansas and the submission of a report with whatever recommendations are in order.

REPRESENTATIVE TO THE ARKANSAS PHARMACEUTICAL ASSOCIATION

T. DUEL BROWN

There has been very little activity during the past year but things are picking up now with the Legislature in session.

The Arkansas Pharmaceutical Association has been most cooperative in all respects and is doing its very best to put and keep pharmacy on the highest level possible.

This Association is very desirous of cooperating with the Arkansas Medical Society in every respect and I hope the physicians will be most cooperative with the druggists.

COMMITTEE ON LIAISON WITH ARKANSAS MEDICAL AND HOSPITAL SERVICE, INC.

ROY I. MILLARD, Chairman

This committee feels that the work of Blue Cross-Blue Shield speaks for itself. As a whole, the profession and the hospitals as well as the patients are as well content with the program as could be expected. The marked growth and increased utility of the program speaks for itself.

Not only has Blue Cross-Blue Shield helped but it has stimulated the consciousness of Hospital Insurance in the minds of our people.

We have no special recommendations to make.

PROFESSIONAL RELATIONS COMMITTEE

O. J. T. JOHNSTON, Chairman

There have been no complaints that have come through my office during the past year.

REPORT OF THE STATE MEDICAL BOARD OF THE ARKANSAS MEDICAL SOCIETY

JOE VERSER, Secretary

The Secretary of the State Medical Board makes the following report of the activities of this Board since the last meeting of the Arkansas Medical Society.

The officers of the Board are as follows: Dr. G. D. Murphy, Jr., president; Dr. M. L. Harris, vice-president, and Dr. Joe Verser, secretary-treasurer. Drs. H. J. Hall, Frank M. Burton and Joe Henry Hardin, members, and Campbell and Campbell, attorneys for the Board.

Dr. Joe Henry Hardin of Little Rock has submitted his resignation as a member of the Board, effective at the April meeting of the Arkansas Medical Society. Dr. Hardin became ineligible to serve following a ruling of the Attorney General, that Instructors in the Medical School are not eligible to serve as members of the State Medical Board.

The annual Directory of Licentiates, which is to be printed shortly after March 1, is to be revised and will include a list of physicians by towns and the towns will be in alphabetical order. The street address of each physician will also be listed. We believe this new directory will be of greater advantage to the physician.

The Secretary of the Board met with the Council of the Arkansas Medical Society at its October meeting and gave a report of the Board's activities for the past year, including the yearly financial report as prepared by Winter, Johnston and Company, CPA Accountants.

The Board investigated every case of violation of the Medical Practice Act reported to the Secretary during the year, although no court convictions were obtained, since in the opinion of the Board's attorneys, the evidence presented was not sufficient to warrant court proceedings. The Secretary regrets to report that six Arkansas physicians were placed on probation by the Board for narcotic violations during the year.

The Secretary and two board members attended the Federation of State Medical Boards Meeting in Chicago in February. The Board still maintains reciprocal relations with forty-two (42) states. The Board no longer accepts Diplomates of the National Board without examination. This action was taken by the Board after the Secretary's meeting with the Council. The Board and the Council thought it to the best advantage of the Board that this decision be made.

Following is a report of the Board's proceedings—February 1, 1952—January 26, 1953.

Physicians registered for 1952:	
Resident	1,291
Non-resident	415
Physicians licensed by Examination	80
Physicians licensed by Reciprocity	55
Physicians certified to other states	56
License revoked for non-payment of annual registration fee	Incomplete
License suspended for non-payment of annual registration fee	Incomplete
Physicians placed on probation for violation of Federal Narcotic Act	6
Court convictions obtained for violation of Medical Practice Act	None
Cases pending for violation of Medical Practice Act	1

Following is a financial report covering the period February 1, 1952, through January 26, 1953. A yearly audit

by a Certified Public Accountant will be made June, 1953.
Cash on hand—February 1, 1952\$14,569.68
Bonds—Series E, purchase price 6,000.00
Collections from the following:

Registration fees	\$4,620.50	
Reciprocity fees	3,050.00	
Certification fees	755.00	
4-year Exam. fees	400.00	
Final Exam. fees	630.00	
Primary Exam. fees	870.00	
Duplicate Certificates	20.00	10,345.50
TOTAL.....		\$30,915.18

Expenditures

Salary—Sec'y & Expense of Board members	\$4,552.54	
Attorney's fee and travel expense to meetings	650.00	
Office Rent	180.00	
Dues of Federation of State Board of U. S.	50.00	
Office Expense — Printing, Tele., postage, frt., stationery, and Withhold. & F.I.C.A. taxes	1,585.94	
Refunds	98.00	
Equipment (filing cabinets (2) and office desk and chair)	167.35	
C.P.A. Audit	150.00	
	\$7,433.83	
Total Expenditures	\$ 7,433.83	
Bonds on Hand	6,000.00	
Cash Balance in Bank	17,481.35	
		\$30,915.18

ANNUAL REPORT OF HOSPITAL RELATIONS COMMITTEE

A. S. KOENIG, Chairman

In September of 1952, at the request of the Executive Secretary of the Arkansas Medical Society, the Chairman attended a meeting in Kansas City, Kansas, called by the Kansas Medical Society to discuss difficulties encountered in that State, as well as throughout the Mid-Western area, in regard to nurses' training. As a result of the meeting, which was attended by representatives of approximately ten Mid-Western Medical Societies, it was recommended that there be set up in the various states throughout the Mid-West a training program of essentially twelve or eighteen months to train Nurses' Aides or Nurse Technicians. The principal problem seemed to be that with the new accreditation methods for Nurses' Training Schools there were many small training schools which were unable to meet the requirements and, therefore, either had lost or were in danger of losing their training school accreditation. In setting up a short course for Nurse-Technicians it was suggested that the states adopt uniform methods of training so that some basis of reciprocity may be established between the states.

In as much as the Chairman of the Hospital Relations Committee felt that these activities fell more within the province of nursing, the minutes and decisions of the Kansas City meeting were turned over to Dr. Hawkins of Searcy, the Chairman of Committee on Nursing.

There were no other problems concerning Hospital Relations referred to the Committee in the course of the year.

The only recommendation offered by the Committee on Hospital Relations is that the Arkansas Medical Society continue its efforts to introduce into the present session of the Legislature a modern Medical Practice Act. Activities in this direction were begun in 1951, and at this time should be renewed.

**COMMITTEE ON VETERAN'S
ADMINISTRATION**

EDWIN F. GRAY, Chairman

The Committee on Veterans Administration has not had much activity during the year. This is partly due to the fact that there have been no immediate problems and also to the fact that proposals of such a nature are being considered by other groups and it was thought advisable to wait for the developments of these other groups before taking action.

COMMITTEE ON ANNUAL SESSION 1953

ALFRED KAHN JR., Chairman

Your Committee on Annual Session has spent a great deal of time trying to insure a good Scientific Program at the 1953 Annual Session. This problem seemed to fall into at least three phases.

The first phase was to obtain well-known medical personages who were good speakers. In the past, the Scientific Program has had good speakers, and a considerable effort was spent this year trying to obtain only the highest caliber type of scientific speakers. The entire Committee began work on this problem as soon as the Committee appointment was made, in order to avoid conflicts with other Scientific Sessions.

The second problem confronting this Committee was to try and have the Scientific Program hold more meaning to the attending physicians. It was the hope of the Committee that the members of the Medical Society could have the scientific material presented in such a manner that the information would be more pertinent to their problems and better absorbed. The Committee set the program up in such a manner that the audience can hear the distinguished out-of-state speakers lecture in the morning, then meet them at a luncheon, and finally, in the afternoon, have round-table discussions so that the practitioner's problem can be discussed informally with these authorities. In contrast to previous years, there will be no formal afternoon lectures. The afternoons will be devoted to informal symposia. The practitioner will have a choice of at least two symposia which he can attend. Because of the limitations of time, it is necessary that the symposia run parallel, rather than in succession. It is hoped that the members of the Medical Society will make a particular effort to attend the informal symposia and will participate freely in the discussion.

The third phase of this Committee's work was to try and improve the attendance and participation in the Scientific Program. In order to do this, it was felt necessary to get prominent speakers and have them talk both formally and informally, but also it was deemed necessary to make an unusual effort to advertise to the Medical Society who their speakers were going to be, and secondly, to publicize the fact that a good deal of the program was going to be informal so that everyone could participate. The Medical Society has generously made space available for the Program Committee to advertise in the Arkansas Medical Journal, and has also set aside a sum of money so that

printed programs can be sent to all members in advance. The Committee hopes that this pre-session advertising will stimulate keener interest in the scientific sessions, and thereby lead to an improved attendance record.

Respectfully submitted for the Committee on Annual Sessions.

**ADVISORY COMMITTEE TO SELECTIVE
SERVICE**

GERALD TEASLEY, Chairman

The following is the report of the Medical Advisory Committee of the Arkansas Medical Society to the State Selective Service System. As Chairman, it is my opinion that all members of this Committee are to be congratulated upon their sincerity of purpose and cooperation during the past twelve months. The determination of availability or essentiality of professional men is a problem not to be taken lightly. Each of the members of this committee has accepted these responsibilities in the manner in which they should be and has investigated the background of physicians in order to determine where they are best qualified to serve their government and country.

Due to lack of funds, frequent meetings have not been possible. Therefore, practically all of the activities except for one meeting in January, 1953, have been carried on by telephone and correspondence. This has proven very satisfactory in most instances.

During the year we have considered 160 individuals. Of this number 105 have been declared available for military service. There is, of course, a smaller number declared essential, who will be declared available upon completion of internship, residency, or other work of a special nature. So far no physicians in Priority II have been called to active duty by order. A good many have been examined and will be examined. Those who have been physically disqualified under previous examination will be re-examined to determine whether their physical qualifications are now acceptable. However, we must remember that the men in Priority III are not to be called to active duty by order under Public Law 779 until after Priorities I and II have been completely exhausted. In so far as this group of physicians, dentists, veterinarians, etc., are concerned, orders have been received from Washington recently that all of those who were at one time declared physically disqualified in Priorities I and II will be re-examined. In view of the reduced standards, it is probable that a large number of these individuals will now be eligible for active duty. If so, they will be reconsidered and called to duty when the State Advisory Committee has been asked to reconsider all other physicians in Priorities I and II who have been declared essential for reasons of public health, welfare, and safety. There is a relatively small number of men to be considered in this group.

It is the intention of your Committee to serve the Medical Society, the State, and the requirements of the military forces in the best possible manner, being fair to all concerned. It is not an assignment that anyone would look forward to with pleasure but is rather a duty that we feel must be performed.

**COMMITTEE ON TUBERCULOSIS
ARKANSAS STATE MEDICAL SOCIETY**

J. D. RILEY, Chairman

No current problems have been referred to our committee and no action has been taken.

We have cooperated with the members of the Medical Society, the sanatoriums of Arkansas, the tuberculosis con-

trol division of the State Health Department, and the Arkansas Tuberculosis Association.

ADVISOR TO THE PRACTICAL NURSES ASSOCIATION

FRED WM. HARRIS

From all over the state we have received excellent reports of the Licensed Practical Nurses. They are doing a splendid job in the hospitals as well as in the homes.

The outstanding achievement in 1952 has been along educational lines. The Kellogg Foundation, cooperating with the State Department of Health, has established schools for the training of practical nurses in Little Rock, Pine Bluff, and Camden, Arkansas. In these schools they are receiving formal training as well as supervised training in the hospitals. Additional schools may be established where facilities are available. Also, extension courses are now being given in some twenty-four centers. These schools are of particular benefit for the Licensed Practical Nurse who desires to improve herself by additional study and training. There are 1,300 Licensed Practical Nurses in the state and 700 of them belong to the Licensed Practical Nurses Association. It is interesting to observe that 700 Licensed Practical Nurses are taking extension courses to improve themselves, even though they are licensed.

The leadership in the Arkansas Practical Nurses Association is to be particularly commended and congratulated for securing the National Convention of the Licensed Practical Nurses that will be held in Little Rock, Arkansas, October 11 to 17, 1953.

REPORT OF THE COMMITTEE ON MATERNAL WELFARE

CLYDE D. RODGERS, M.D., Chairman

The Committee on Maternal Welfare desires to report a marked increase in the interest in obstetrics in the State of Arkansas. It is thought that this interest largely has arisen through the refresher courses in obstetrics which are given at the University of Arkansas School of Medicine. These courses are well attended by doctors from all over the state. The last such course was attended by twenty-two physicians of the state. These men were taught by two out of state guests and by the faculty at the school. There is now being organized an Arkansas chapter of the American Academy of Obstetrics and Gynecology. This state organization will be a part of the 7th District of the American Academy of Obstetrics and Gynecology. Arkansas is to be the host for the first district meeting some time this year.

Your committee wishes to commend the General Assembly for passing the compulsory pre-marital serology examination.

The committee did not put into effect the recommendation of last year's committee that each maternal death be investigated by a member of the committee.

PROGRAM WOMAN'S AUXILIARY MONDAY, APRIL 20, 1953

Continental Room, Hotel Marion

9:00 A. M.—Registration, Ante-room to Continental Room.

9:15 A. M.—Pre-Convention Board Meeting.

10:00 A. M.—Opening General Session — Mrs. Hoyt

Choate, President, Pulaski County, Presiding.

Invocation—Mrs. C. E. Kitchens, Chaplain.

Address of Welcome—Mrs. Erner Jones.

Introductions of State Presidents—Mrs. A. A. Little, Texarkana.

Response to Address of Welcome—Mrs. L. Gardner, Russellville.

Introduction of Guests—Mrs. Ralph Eusden, Long Beach, California, President of the Woman's Auxiliary to the American Medical Association.

Mrs. R. L. Stover, Miami, Florida, President of the Woman's Auxiliary to the Southern Medical Association.

Mrs. Mason G. Lawson, Treasurer, Woman's Auxiliary to the American Medical Association.

Reports of the Officers.

Recommendations from Board of Directors—read by the Secretary.

12:30 P. M.—Luncheon for Mrs. Ralph Eusden, President, Woman's Auxiliary to the American Medical Association.

Mrs. A. A. Little, State President, presiding. Address—Mrs. Eusden.

3:30 - 5:00 P. M.—Tea in the home of Mrs. Hoyt Allen, 24 Edgehill Road, for Auxiliary Members and visiting Doctor's Wives. Transportation will be furnished.

TUESDAY, APRIL 21, 1953

Continental Room, Hotel Marion

8:00 A. M.—Past Presidents' Breakfast, Parlor B—Chairman, Mrs. Curtis Jones, Sr., Benton.

9:00 A. M.—Second General Session. Presiding—Mrs. A. A. Little, President, Texarkana.

Invocation—Mrs. C. E. Kitchens, Chaplain, DeQueen.

Unfinished Business.

Election of Officers. Mrs. R. C. Dickinson, Horatio.

Installation of Officers. Mrs. R. C. Dickinson, Horatio.

Memorial Session—Joint Session with the Arkansas Medical Society, Ball Room.

1:00 P. M.—Luncheon—Little Rock Country Club. Mrs. Hoyt Choate, Presiding, honoring Mrs. Richard Stover, Miami, Florida, President Woman's Auxiliary to the Southern Medical Association.

Address—Mrs. Stover.

Fashion Show. Models to be wives of Pulaski County Doctors. Clothes will be furnished by Town & Country, Little Rock, Arkansas.

7:00 P. M.—Banquet—Ball Room, Hotel Marion.

Address—United States Senator from Arkansas, John L. McClellan.

Dance.

WEDNESDAY, APRIL 22, 1953

Continental Room, Hotel Marion

10:00 A. M.—Post Convention Board Meeting and School of Instruction. Committee Chairmen, District Council Women, County Presidents and Councilors are urged to attend.

12:00 Noon—Dutch Treat Luncheon—Everyone Invited.

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THE *Journal* OF THE *Arkansas* *Medical Society*

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W. R. BROOKSHER, M. D., Editor
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ECTOPIC PREGNANCY: ANALYTICAL AND DIAGNOSTIC FEATURES

MELVIN R. McCASKILL, M.D., THOMAS TRIEBER, M.D.

Little Rock

and

E. T. ELLISON

Texarkana

The diagnosis of ectopic pregnancy continues to be one of the most difficult to be made in the field of gynecology. Severe abdominal catastrophies are often the only criteria of diagnosis. Ill-timed and heroic surgery often results with all its dangers and shortcomings.

In attempting to clarify this situation a study of all the cases occurring at two Little Rock hospitals over a seven-year period was made. The results tabulated below plus an evaluation of diagnostic methods now available suggest a clearer pattern for diagnosis of cases which may be ectopic pregnancies.

The one hundred cases comprising this study include only those cases confirmed by operation and subsequent pathological study. Unfortunately it is impossible to obtain the records of cases which were operated upon for ectopic pregnancy and proved to be other conditions. It is our impression, however, that this group is quite large. Table I shows the wide variation of clinical diagnoses that led to surgery and in which ectopic pregnancy was found. It is seen that 52 per cent of the cases was correctly diagnosed while an additional nine per cent was strongly suspected of being ectopics as indicated by the double diagnoses.

TABLE I

Preoperative Diagnoses of Cases of Ectopic Pregnancy

Clinical Diagnosis	Cases
1. Ruptured ectopic pregnancies	52
2. Tubo-ovarian abscess	10
3. Combined diagnosis including ectopic pregnancies	9
4. Ovarian cyst	8
5. Acute salpingitis	7
6. Uterine fibroid	4
7. Incomplete abortion	2
8. Chronic appendicitis	2
9. Intestinal obstruction	1
10. Hyperplastic endometritis	1

11. Appendicial abscess	1
12. Common duct stone	1
13. Chronic cervicitis	1
14. Polypoid endometritis	1

The average stay in the hospital prior to surgery was 5.58 days with a mean variation from one and one-half hours to 28 days. When it is considered that many of these cases were classed as elective surgery prior to operation, it is more readily understood why the interval between admittance and operation was quite long in some instances. Only 28 per cent of the cases could be considered critical and thus be true abdominal catastrophies. These were all operated upon with a period of 12 hours.

The surgical procedures as carried out are summarized below.

TABLE II
Surgical Procedures

Surgical Procedure	Cases
1. Unilateral salpingectomy	65
2. Bilateral salpingectomy	31
3. Hysterectomy	9
4. Unilateral oophorectomy	58
5. Appendectomy	36
6. Dilatation and Curettage	4
7. Conization	4
8. Myomectomy	3
9. Perineorrhaphy	3
10. Bilateral salpingoophorectomy	1

It is apparent that a variety of procedures accompanied the removal of the diseased tube, but for the most part only the diseased tube and the adjacent ovary were sacrificed. Undoubtedly many of these procedures were carried out while the true disease process had not been fully ascertained. The blood count was low in all cases, averaging 3.2 M. R. B. C. with W.B.C. of 11,900. The transfusions given to 49 per cent of the cases are tabulated relative to the time of administration.

TABLE III

Time and Number of Transfusions Given

Time of Transfusion	Cases
1. Before operation	19
2. Before and during operation	2
3. Before and after operation	7
4. During operation	9
5. During and after operation	5
6. After operation	14

No blood bank facilities were present at the time the majority of the cases were admitted, and this probably accounts for the relatively small amount of blood administered. It seems significant to us that only 28 per cent of the cases received blood before surgery, a fact which further emphasizes the assumption that these cases are not primarily emergency procedures.

When surgery was performed, 74 per cent of the patients had gross blood in the abdomen and cul-de-sac, indicating a rupturing or tearing of the products of gestation. However, it is difficult to anticipate how many would have had signs of inter-abdominal bleeding had surgery been done earlier in these cases. All cases were ruptured at the time of operation and must have contained intra-abdominal blood at some time. Recovery time varied considerably but averaged 13.9 days which, when added to the pre-operative stay, accounts for a total hospital stay of three weeks.

Summarizing thus far we are presented with a condition which is a gynecological-surgical problem and which is often found only after an exploratory laparotomy. Treatment is relatively simple but statistics show that operation is often delayed and patients subjected to a long hospitalization period, due largely to inability to make an accurate diagnosis.

In a consideration of a diagnostic criteria, the presenting symptoms are of three types. First, there are those associated with pregnancy such as nausea and vomiting, breast changes and a change in menstrual regularity. A second set of symptoms arises from the fact that a tumor has appeared in the female pelvis; while a third group of symptoms results from the rapidity of growth of the tumor and the catastrophies resulting from lacerations of the normal pelvic structures. Table IV presents the symptoms of the cases which we have studied.

TABLE IV
Symptoms Associated With the Cases
of Ectopic Pregnancy

Symptoms	Cases
1. Pain and bleeding	44
2. Pain only	18
3. Nausea and vomiting, pain and bleeding	16
4. Nausea and vomiting, with pain	14
5. Bleeding	5
6. Nausea and vomiting with bleeding.....	1
7. Nausea and vomiting only	1

An appraisal of the usual presenting symptoms reveals that only 16 per cent had all the classical symptoms—nausea, vomiting, pain and bleeding. Moderate anemia was present in all cases but was considered only a suggestive finding. Further diagnostic procedures included abdominal tap, two; cul-de-sac puncture, three; biological tests for pregnancy, nine; and X-ray, three. No harm resulted from the two abdominal punctures, but questionable damage occurred in two cases in which the procedure was carried out and no ectopic pregnancy was found. The biological tests for pregnancy were not uniformly positive and X-ray did not aid the diagnosis of any of the cases. The cul-de-sac puncture was used only on the University Hospital service and only during the last year of the study. Then punctures were done resulting in no unusual trauma. Three revealed free pus, four no findings and three that are included in the study above revealed free blood associated with ectopic pregnancy.

The cul-de-sac aspiration or direct culdoscopy has been advised again and again without gaining adequate recognition. The latter procedure of course requires unusual equipment and therefore limits itself to relatively selected cases. However, cul-de-sac puncture as advocated by one of our advisors has been used over a period of 15 years without a single untoward result. The technique and equipment are simple and have been described by numerous authors. Our technique consists of exposure of the cul-de-sac, cleansing of the area immediately posterior to the cervix, local anesthesia with one per cent novocaine, nicking of the mucosa with a stilette pointed knife and the insertion of a 13-gauge needle with a short bevel into the cul-de-sac for the distance of one or two cm. Gross blood is easily found. The insertion of a few cc. of air before aspiration will sometimes aid in obtaining free blood.

CONCLUSIONS

An analysis of ectopic pregnancies at two local hospitals over a seven-year period indicates that ectopic pregnancies are often incorrectly diagnosed and patients subjected to long hospitalization. Analysis of the cases further indicates the lack of reliability in the classical signs and symptoms for a correct diagnosis. Further diagnostic aids are indicated and it is our impression that the cul-de-sac puncture presents a diagnostic procedure that will materially aid in a more adequate diagnosis.

EXEBIATRIC GYNECOLOGY *

LeMON CLARK, M.D.
Fayetteville

Dr. H. Boyd Stewart of Tulsa, Oklahoma, in his address as Chairman of the Section on Anesthesiology last year said, "I say frankly, and with no doubt in my mind, that medical organization from top to bottom has passed up many opportunities to round out the post-graduate education of its members by . . . making programs too scientific. This strict limitation to technical and investigative subjects has practically excluded the consideration and discussion of many important topics, invaluable to the practitioner in the application of his art." Dr. Stewart's remarks really give me courage to present this paper.

Professor H. Lloyd Stow, Department of Classical Languages, University of Oklahoma, suggested the term, "exebiatic" to cover the period of middle age. He tells me that "exebos" was used by Aeschylus early in the fifth century B. C. Literally, it means "one who is past early manhood" or, as it was defined by another writer, "one past thirty-five years of age." This might include old age, but it is generally understood to mean "middle age." Hence the title, "Exebiatic Gynecology."

We, as physicians, must begin to give more consideration to the needs of middle-aged women. In 1776, the average age at death was 36. In 1900, it was about 46. Today, it is 68. For women, alone, it is past 70. Millions of women—and their husbands—now live well through middle age. The volume of problems incident to this can no longer be ignored.

Exebiatic gynecology considers the anatomical, physiological needs of the woman patient, of course. Complaints of tenderness, soreness, or lumps in the breast should be carefully examined, biopsied where necessary, and every assurance given such a patient that she need not worry at this particular moment about having cancer; or, if cancer is found, adequate methods should be instituted to protect her life and health, and if at all possible normal sexual function.

If such a patient comes with complaint of vaginal discharge or vaginal soreness or tenderness, the vulva, labia, vagina, and cervix should be carefully inspected. Microscopic examination of the vaginal smear for trichomonas or yeast is, of course, routine. Cytological study as per Papanicolaou may be indicated. Bi-manual examination of the uterus and adnexa would be done as a matter of course.

Complaints of extreme nervousness, irritability, hot flashes, insomnia, and emotional upset are common. Do you routinely and almost at once start her on estrogen, either by parenteral or oral administration? Are you sure they are absolutely necessary? Reassurance, sympathetic discussion of the menopause, and resolution of some of her fears may do more. Some of the belladonna alkaloids combined with a mild sedative may reduce her troubles to the vanishing point. Encourage her to get nine hours of sleep, the physiological requirement for an adult female. Is anything more really necessary?

The art of human relations and of exebiatic gynecology consists in finding out what **really** brings the patient to the doctor. An exebiatic patient comes into the office and, with some hesitancy, says, "What I **really** want is a **thorough** examination." She has come to you because you are a gynecologist. Such a woman wants and expects a vaginal examination. Why? Not from your point of view, but from hers!

Throughout the whole of your history-taking, it is possible to sense that, on the part of the patient, there is reluctance to tell what really brings her to the doctor. Do not carry the history too far or crowd her too hard as to what is worrying her just then. Do a very careful examination, blood pressure, urine, breasts, abdomen, vulva, vagina, cervix, and adnexa. If weakness or irritability or lack of stamina is one of the complaints, have a complete blood count, if obese, a B.M.R. and Blood Iodine.

Everything is found to be well within limits of normal. What does one do then? Simply say, "Well, Mrs. Jones, there is nothing the matter with you. I think everything is just fine. Just 'carry on' and come back and see me again in six to twelve months for another check," and usher her out the door? If you do, you have failed miserably to help that patient.

Walter C. Alvarez in his book, "The Neuroses," has one line which we all need to heed. He says, "The patient frequently leads a low card, hoping the doctor will follow suit." I would change the metaphor. A patient leads a low card, hoping the doctor holds the ace. When a patient comes to you with a rather vague set of complaints, she is hoping that **you** can find some way of helping her. You can find some way of helping her only if you find out what is troubling her. Having reassured her as to anatomy and physiology, a blunt question, albeit in a kindly tone of voice, may help. Ask her, "What really is troubling you? There is nothing we can't put into words. If you think you can't do it, just try and see if I can't

* Read before Section on Obstetrics & Gynecology, American Medical Association, Chicago, June 11, 1952.

help you." Such a patient may then open up and discuss some of the things that are troubling her.

If she still seems incapable of putting it into words at that point, the burden falls upon you to help her. A good starting point may be the question, "How are you and your husband getting along?" If she seems genuinely and completely truthful when she says that they are getting along very well, ask her about her children. "Is everything going all right there?" This may bring forth discussion as to the problem she is facing with a fifteen to twenty-year-old son or daughter. Just to have a sympathetic listener in whom the patient has confidence and who actually, because of training and experience, should be able to counsel and perhaps advise wisely is one of the greatest therapeutic agents we can use for such a situation. Some patients return two or three times before they finally summon up courage to bring out what **really** is troubling them.

Given an opportunity of talking to the doctor, you may find that one of her forty-year-old friends has just given birth to a baby and she is very much worried about the possibility of its happening to her. Her children are nearly grown and she may be genuinely concerned over starting another family. Such a patient needs reassurance and may need to be given adequate information on the subject of birth control or contraception. Another forty-year-old may need to be encouraged to go ahead and try to have a baby. Either woman may be genuinely lonesome. For one, the children have grown up and left home. The other suddenly realizes that the possibility of her ever having a baby is nearly gone. Each may have a sense of great frustration and futility. Suggestions as to what to do, become a hospital "gray lady" or a YWCA helper, or to take active part in any of numerous other community projects may be welcome.

The middle-age spread may be worrying her. Not infrequently women past forty gain ten, fifteen, or twenty pounds in one or two years. They are convinced something desperate must be the matter with them. It never occurs to them that, as their children have grown up and left home and they are doing much less, they should eat less. Since eating is one of life's pleasures, it is sometimes hard for us to adjust to the fact that we can get along with eating a great deal less after we cross the forty line.

The same change may be going on in her husband making her vaguely unhappy. If the modern American male has not learned to love the Rubens' type of full-blown figure, she may find it quite as difficult to maintain a satisfactory emotional, erotic fixation upon a paunchy adult male with a

"slipping chest." Discussion of diet and directions for both of them to take off weight may not only increase comfort and prolong life, but preserve an affectionate, satisfactory, erotic relationship.

Why did she come to a gynecologist and say that she wanted a "complete" examination? As has already been said, that meant that she wanted a vaginal examination or hoped somehow to find an opportunity of discussing sex. If there is no history of discharge, excessive bleeding, or discomfort—which she feels free to mention—what brought her to you? Was she completely truthful when she said all was well between her and her husband. Is there discomfort she does not dare mention? During the reproductive period, the vaginal mucous membrane is composed of many layers of cells, as you all know, and is very durable epithelium. Sometimes, rather early in the menopause, there comes a change in the mucous membrane of the vagina. The number of layers of cells decreases. From forty-five layers or more during the menacme the vaginal mucosa decreases to six or eight layers in senility. Early in this change, it may become much more sensitive. Intercourse may be causing tenderness which she has never noticed before and this is what really bothers her. Where the husband is still a vigorous, potent middle-aged male, she may be in genuine distress.

Sometimes the vaginal tenderness is intensified by the necessity for prolonging intercourse because of the advancing age of the husband. Now that he has reached the age where intercourse can or must be prolonged, as she formerly wished it could be, she cannot enjoy it because of vaginal soreness! It is foolish to give parenteral or oral estrogen to correct changes in the vaginal mucosa when local application does it so easily and with little or no systemic change. An estrogen cream such as Premarin applied once or, at most, twice a week will restore vaginal mucosa to normal. A small amount used as a lubricant on the penis at the time of intercourse may be all that is required to accomplish this. Actually, this will greatly improve the whole situation between her and her husband. Intercourse no longer irritates her and, with a normal mucus output from the vagina, intercourse will be far more satisfactory to him.

Some women—not an inconsiderable number—have found a marked increase in sex desire during the menopause. Some who can be articulate about it attribute it to the release from the fear of pregnancy. It may be caused by physiological or psychological changes. We don't know. Whatever the cause, where a woman feels there is something wrong, where the husband, suddenly faced with an amorous wife, shows surprise, she

may very well worry herself into a serious emotional state.

Other women may be disturbed by a marked **decrease** in desire. Reassurance that intercourse is not only permissible but desirable even after menstruation ceases may be of great help. Small amounts of androgen parenterally or by buccal tablet may help, estrogen may help. One woman returned and quite hesitantly said her husband sent her in for another shot like the one she had had several weeks before for quite another reason—she had been so much more interested in him.

There are problems of the younger wife and much older husband. Progesterone may reduce sex desire for her in such a case and make living more comfortable. Just to know she isn't a naughty, wicked woman because she finds it a bit of a problem can be a great help.

A middle aged spinster or widow may need the same kind of reassurance and treatment, for the same reason.

As medical men, we must be willing to deal with life and living quite as much as with pathology. We must be willing to doctor our patients' emotions as well as their infections. Preservation of normal, satisfactory sexual activity and response is a part of our task.

Psychiatrists are overburdened because we, as gynecologists, fail in our duty to our patients. Other so-called schools of healing flourish for the same reason. As physicians, we need to educate ourselves in the emotional needs of our patients quite as well as their anatomical or physiological pathology.

If we needs must re-educate ourselves a bit to free ourselves from childish concepts of sex as sin, as something even **we** cannot talk about, we had better set about it. We must be able to discuss sexual questions in decent, scientific terminology, not colloquial gutterisms, without smirking, without laughing it off as a jest. We cannot deal with problems of exebiatic gynecology with any degree of adequacy unless we do.

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RECENT ADVANCES OF PRESENT TRENDS IN CANCER TREATMENT AND RESEARCH: SURGERY *

GEORGE T. PACK, M.D., Attending Surgeon
Memorial Hospital, New York City

A review of the more recent accomplishments in the surgical treatment of cancer should not properly be a mere recital of the technical advances which surgeons have made, but a consideration of the overall improvement with which the surgeon has to deal, and among those is a changing point of view on the part of the citizenry of this country, laymen, patients and future patients, which has been evident to us, particularly during the past ten years.

Much of this accomplishment and improvement may be accredited to the educational efforts of the American Cancer Society through its various agencies.

I can recall not too many years ago when it was said that any person who dared to operate and remove a cancer of the stomach had no thought but to kill two at a single blow—one, the patient, and the other was the surgeon's reputation.

Now the change or the dissipation of pessimism on the part of our patients, present and future, and the increasing optimism on the part of the general practitioners who now see the patient first, has led to an early referral of these patients for proper and radical surgical care, and in consequence of that, marked improvement is seen in the end results of treatment, a higher rate of curability and obviously a lessened operative mortality.

Furthermore, patients and doctors alike are not requiring of the surgeon next to a guarantee of a cure before carrying out an operative procedure in a disease that would be otherwise fatal if untreated. They are willing now to place themselves in the hands of the surgeon and permit him to do what his common sense and his experience tells him is the proper thing to do.

The measure of the surgeon's accomplishment in the past in the treatment of this disease has been in the number and the percentage of so-called cures or definitive cures, meaning a survival for five years without recurrence of the cancer that he has been able to report in a given series of cases of any one histologic or other variety of cancer.

Now that accomplishment is a very sorry one indeed. It does not apply to any other serious disease which afflicts people of later or middle age. No physician here or anywhere else in the

* Presented at the Research Program of the Annual Meeting of the American Cancer Society, Inc., October 23, 1952.

country is able to cure the degenerative diseases of the heart or chronic nephritis or many of these other diseases in which a considerable part of the body is lost.

The patients and the family doctor alike ask the physician under these circumstances to do what he can to prolong life in comfort, to avoid complications and to give this individual a normal, as near as can be given, life expectancy, realizing that every year so added to their life will be that much accomplished.

There are many operations today which are planned as curative and are done with a hope of cure, but which end up being palliative, in which case the patient dies short of the five-year period of the definitive cure. Those one, two, three and four years of comfort that have been given by the application of surgical measures must not be discarded as failures.

I only ask what you would do; what would you sell one year of life for if you knew you had only one year to live? So we surgeons are perfectly content to operate and do some of these most radical procedures requiring even three or four hours of arduous work, of questionable outcome, operations which are dangerous to the patient and dangerous to the surgeon's reputation, but if in return for that we can give the patient one, two or three years of comfortable life, that exchange of time is indeed very well worthwhile.

There ought to be some measure of credit, let us say, for the accomplishments of surgery in this regard. The palliative results of the surgical treatment of cancer, that is.

I believe there is a changing definition of the inoperability of cancer through these years. No surgeon closes the abdomen or the chest at the time of an exploratory laparotomy with the decision made at that time that the cancer is inoperable without having a sense of futility.

His failures under these circumstances keep him forever humble and sometimes they give him sleepless nights because he must ask himself whether his definition of inoperability at such a time is due to the actual extent of the disease, absolute inoperability and incurability or his own timidity in undertaking an operation of great magnitude, whether the inoperability is due to technical difficulties, to the involvement of multiple organs, to his own fear, his own morale, his own state of mind.

We must take care in our desire not to be the executioner of the patient that we do not accomplish the same end by functioning as an immoral judge.

When an abdomen is opened, or a chest, in a patient who has cancer, the surgeon is faced with the necessity of making an immediate decision whether or not to attempt the operation. That decision requires only a few minutes, and yet in a criminal case, a judge and jury may deliberate for weeks as to whether or not that patient's life shall be taken.

So it is a very serious responsibility and, therefore, since we are battling in an effort to save the life of the individual, we shall not be criticized for attempting the impossible, realizing that failure means in effect death.

Again, I believe the surgeon's point of view changed so that we no longer look at our patients subjectively rather than objectively in deciding whether to do an operation which may mutilate them. I have heard surgeons say, "I wouldn't wish that operation on any of my patients. I wouldn't leave them so disabled with an entire lower extremity and half the pelvis removed. I wouldn't take out the rectum and the bladder and all the pelvic contents and leave them with multiple openings on their abdominal wall."

According to the Hippocratic oath, the surgeon shouldn't project himself into the patient's position. He is not familiar with the environment of the individual, with that patient's place in that family, with his obligations to the family and to society, nor can he place himself within that patient's mind to determine his will to live, his necessity to live at all costs.

If he is actually able to carry out these operations, mutilating though they may be and dangerous, he must have a vicarious form of courage to suffer these patients' illnesses, consider them objectively and do the operations if it is actually possible for it to be done.

As an example of that, I can say that I don't remember an instance of any happier patient than a young woman who was told recently by us that she would have to have a sacrifice of her urinary bladder, her rectum, her uterus, her vagina, her vulva with removal of the lymph nodes in the groin and the pelvis for an extremely advanced cancer of the pelvic organ.

Under ordinary circumstances, faced with such a prospect of disability the average person, without pre-warning, would be terribly distressed. This woman rejoiced. She was indeed happy because she had been refused all help elsewhere, and she rejoiced because she had three small children.

Her devotion to her children influenced her decision as she said, "I am delighted that there will be someone that will undertake this procedure. What do these disabilities mean to me if it gives me an opportunity for living just one or two

or an indefinite number of years to help in bringing up my small children?"

And so we cannot make these decisions for our patients. We as surgeons must be the tools or the instruments which are put into our hands by our training and experience and give these patients an opportunity for life, even if it only is for a short period of living.

I believe that we have made it a practice of treating cancer where we find it and do all that is humanly possible by surgery and radiation and other methods to have these people live in comfort.

By palliative relief, I don't mean to let a patient live longer and suffer more. I mean that we give them a period of post-operative life which is comfortable and which is worth having. I saw a young girl this morning—I am mentioning this, you will excuse me—young woman of thirty years of age who now has a stricture of her cervical esophagus and has to have it dilated so that she can swallow.

When she was eleven years of age she had a cancer of her thyroid gland, developing rapidly after her second menstrual period. It was affixed to the trachea. It was inoperable.

The sections were reviewed by Dr. Ewing and Dr. Stewart of Memorial Hospital. It was a highly malignant cancer. We treated it as best we could by a radical surgical attack, followed by interstitial irradiation.

When she was about ready to return to her home in Alabama, she had symptoms of increased intracranial pressure, vomiting, dimness of vision, headache and she now evidenced choked discs. In short, a ventriculogram revealed the presence of a tumor projecting into the lateral ventricle. What to do under these circumstances? We believed that metastasis had occurred to her brain. We urged that a craniotomy be done and the tumor removed.

I have recalled an instance in which Dr. Harry Cushing removed a metastatic thyroid cancer of the brain and the patient was living and well seven years later. There was no thought of cure but to treat cancer where you find it, after which argument they consented to the operation.

Dr. Byron Stoukie, our neurosurgical consultant at the Memorial Hospital performed the craniotomy and removed this tumor of the lateral ventricle which was metastatic thyroid cancer. That was when she was eleven years of age. She is now thirty years of age. She is married and has two children. She is a happy and successful mother, wife and citizen. If you ask me whether she is cured, I would say very likely not. There may be hidden foci of cancer somewhere within her

body, but she has had these happy years and successful years of life, and I use that as an illustration of what we can accomplish by the surgical treatment of cancer if we carry out the policy of treating it where we find it as long as it is possible for us to do it.

There is no cancer so very early that we can guarantee a cure and there are few cancers that are so extremely far advanced, at least in their local extent, but what we are not sometimes surprised to find that they are controllable.

These miracles have happened to every surgeon who practices the treatment of this disease. Now I believe that a second advance—and I am still as you see far removed from the technical achievements that have occurred within the last decade—the second advance, an even more important one, has been the utilization of proper surgical procedures in the country as a whole, the availability of good surgical treatment for cancer in the small cities throughout the United States.

Twenty years ago there were only a few large medical centers, a few tumor hospitals, in which some of these radical operations were being performed. They were the meccas for those doctors in the country who wanted to learn how to treat cancer, and so they came there and they were leaders, so to speak, in this early movement.

But now wherever you go in the United States, you will find young men well trained in good hospitals who are doing all of these radical surgical procedures. In other words, it isn't only the patient in the large metropolitan center that is now having the advantage of the proper surgical treatment of cancer, nor those who have sufficient money to get to the large centers, but it is being done all throughout the United States, and that of course is a remarkable achievement and one that will be measured by a greatly increased percentage of salvage of our citizens in the United States as a whole.

Why has that come about? That has come about too because of our educational efforts in our medical schools, of course, and I know for a fact that a great deal of it has come because of the activities of many young men who had opportunities for special training in the diagnosis and treatment of cancer, and much of that training has come about through fellowships that have been offered these men by grants from the American Cancer Society and from our National Institute of Health which have collaborated to educate these men.

They have gone out in the key centers and by their example and by their own teaching have

helped to stimulate the local surgeons to carry out these operations which are now being universally applied.

Still we have not touched on the theory and the practice of surgery as it applies to advances in the surgical treatment of cancer in the last ten years. We cannot approach these technical achievements until we also give credit to the ancillary services which I think are equally important. We surgeons, in our conceit, are only too prone that we have been able to carry out these new methods through our own researches and abilities. We must give credit to other sources.

One of them is the anesthetist, a most remarkable specialist in the United States today, because he is not only a remarkable internist, but he is a cardiologist, a hemotologist, a pharmacologist, a chemist and one who practices minor surgery, and it is by his remarkable achievements that surgeons now feel free to proceed with these dangerous operations which in the past caused death by shock and loss of blood and other complications. And together with that are the contributions that our colleagues in other specialties have contributed, such as the pathologist, the biochemist, the physiologist, in studying the cancer patient, in making the cancer patient safe for surgery, in knowing the metabolic disturbed answers that are associated with cancer, and a great deal of this research which is cumulative and available for all of us and from which we have all profited has been the result of the research efforts which have come from such sources as the grants through the American Cancer Society and our own National Institute of Health.

This has made it possible for us to do operations today safely which we couldn't attempt in the past.

Now about the technical achievements. I have left this for the last, because to me, of course, it is of more direct interest because it is the field of surgery in which I have been most directly concerned.

I do not propose to review the entire scope of the surgical treatment of cancer in this brief time, but let us just see the way in which, in different portions of the body, there have been advances made and will continue to be made as the years go by.

Most of these have been accomplished within the past ten or fifteen years. In the surgical treatment of cancer of the oral cavity, for example, of the lip, the tongue, of the floor of the mouth, the inferior alveolus, the cheek and the tonsillar pillar, I am not entering into the discussion of the relative merits of radiation and surgery in the treatment of these cancers. Having had some train-

ing in both fields, I believe I am broadminded about the proper relationship of the two and the conjoint application of the two in the treatment of certain of these cancers, but if we consider the surgical principle of treatment alone, it has only been within the past ten years that we have carried out the principle of examination and dissection in continuity, by which we mean the complete removal of the organ containing the primary cancer, the lymph nodes into which the first relay of metastases are deposited and, equally important, the intervening lymphatics between the primary and secondary sites.

Ten or more years ago a patient with cancer of the tongue would have a simple glossectomy. Then there would be a possible radical neck dissection to remove the lymph nodes in the neck. This would be the case in the majority of instances when metastases were apparent in the lymph nodes.

What were the consequences of this procedure? There were some cures obtained. The cure rate was low. The surgeon was often confounded by finding the patient some months or a year or two later to have a recurrence in the intervening tissues, an infiltration throughout the lymphedematous portion of the floor of the mouth and the cheek, rendering the condition completely inoperable and, of course, incurable by radiation.

We forgot that in these lymphatic pathways between the primary organ and the major lymph nodes which are well known to every anatomist that there are small lymph nodes and they may come out of the cancer cell.

Now the procedure of examination and dissection in continuity is employed so that if the tongue is removed, at the same time in the same operative procedure, the tongue, the floor of the mouth, the mandible, the lymph nodes in the neck are removed all together intact and in doing so we are carrying out one of the prime tenets of proper cancer surgery because we are removing these organs with the intervening lymphatics.

It is strange that all of these years since 1892 have elapsed since Halstead and Myer performed radical mastectomy which so far as I know is the first application with respect to continuity, an operation which lasted well because it did embody that principle of removing the intervening lymphatics.

There is a high expectation of a higher percentage of cures in these cases.

Let us proceed to the neck, the management of cancer within the neck; cancer that in the past has involved the internal carotid artery has been fatal in a majority of cases.

Surgeons interested in vascular surgery in the earlier days, Dr. Metas, have devised devious methods with regard to that because it is known that in aged subjects with an average age of sixty years in whom cancer of the neck occurs, and in which there might be the necessity of removing this important blood vessel which goes to the brain and supplies it with its nourishment, a removal of the carotid bone caused an operative mortality or a paralysis in as high as sixty per cent of the patients.

In other words, this hazard was too great for one to overcome, and in many of these patients if it was found that cancer involved these important vessels the surgical treatment was abandoned and the patient was referred to the radiologist for palliative irradiation.

In the past year and a half we conceived of the idea that it might be feasible to do an anastomosis between the internal and external carotid arteries. These are removed from the heart. Because there is an abundant collateral circulation forming from the opposite side to the external carotid, we reasoned that there might be a sufficient flow of blood up from the internal carotid to keep the brain alive. If this circulation occurs, then ischemia to the brain wouldn't appear; ascending thrombosis wouldn't occur.

This was done on dogs and later on human beings. In the cases in which we have applied it, there has not been an operative death. There has not been an instance of hemiplegia.

Other efforts have been made in transplanting a graft of the vein to the neck in which they were destroyed by previous operation and here there have been some operative deaths due to the fact that it has been done with irradiated tissues.

Now the operation is more radically performed and we have the prospect of offering an opportunity for life to these people with deep cancer invading the large vessels of the neck.

In years past, too, if the cancer had spread to the opposite side of the neck it was thought no surgical treatment could be done except of a palliative character. Now it is known that one can do bilateral dissections, even removing both internal jugular veins and relying on the bilateral veins for the collateral circulation.

This is done in patients with tracheotomies, with a needle in the presence of the spinal canal, the withdrawal of fluid if the pressure gets too high, and these people survived these operations as they had not done in the past, providing proper anesthesia is employed.

As we progress into the deeper portions of the neck we think of cancer of the upper esophagus in the neck which has been a most difficult surgi-

cal operative procedure. There have been very ingenious operations in which, after the removal of this cancer, the stomach has been brought up from the abdomen through the diaphragm, through the chest into the neck and anastomosed at the base of the neck, a most laborious procedure and one that is not entirely satisfactory.

In more recent months, in fact within the past year, there have been efforts in which grafts have been done, a skin graft with the excellent instruments available now for skin grafting replacing the cervical esophagus, and that was done successfully.

I mention that because in the instance of a recent patient just done ten days ago this patient is now swallowing through such a graft and will be shortly ready to leave the hospital with only one operative procedure being done, whereas a few years ago multiple stage operations were done in an attempt to substitute for this cervical esophagus.

In the chest it has been within only recent years that a pneumonectomy has been done for cancer. As you know that patient—the operation being performed by Dr. Graham—the patient is still living.

The earlier operations for cancer of the lung consisted of pneumonectomy or lobectomy, a partial removal of the lung. Now, the surgeon who operates for cancer of the lung does not carry out a simple removal of the lung any more than the surgeon who operates for cancer of the breast is content to remove only the breast. He realizes that it is his duty to do a dissection of the mediastinum and to remove the lymph nodes together with the lung, and so the scope of surgery is spreading to practically all of these organs.

In the case of the breast, our point of view had to change necessarily there too. Since 1892, we surgeons have been performing the same type of radical mastectomy that Halstead and Myer independently conceived so many years ago.

It has been a good operation, probably the most successful operation for cancer, and it has resulted in an increasing percentage of cures, not because the operation has been more radically performed but because the patients are coming earlier, because fewer of them have metastasis to the axilla.

The operation has been modified a bit in various centers by the type of incision made, by the amount of skin removed, by the substitution of skin graft instead of plastic closure, but it has not been greatly modified. Within a relatively short time, surgeons who should never have been content with any end result in the treatment of cancer short of perfection, have tried to improve this

percentage by a more aggressive attack on those lymph nodes which are involved by cancer and which in previous years were beyond the scope of surgery.

Dr. Wangenstein in Minneapolis, Dr. Haagenesen at Columbia and others have attacked this problem. I am quoting the figures of Dr. Urban because I am more familiar with them. He found with respect to those patients with cancer in the medial portions of the breast that the lymphatics in that site, as was well known from our study of Cuneo and other anatomists, were quite abundant and emptied into the lymph nodes of the internal mammary chain.

By taking out at the time of the radical mastectomy the outer portion of the sternum with the costochondral cartilages, this portion of the chest wall, he found that in fifty percent of the cases there was demonstrable metastasis involving these lymph nodes on the inside of the chest. On fifty cases in which this operation was done, twenty-five of these patients had lymph node involvement without an operable death. That operation will probably have to be done as a routine procedure for cancer in that particular location.

The other change in the management of breast cancer that has developed of recent years is the concept that the disease should not be considered as a disease of one breast, nor should it be considered that a woman has two separate breasts, but instead a single mammary system. After all, both breasts are affected by the same carcinogenic factors that cause cancer in one.

More and more we are finding women with cancer occurring in the opposite breast who have successfully recovered from a radical mastectomy. We recently discharged a patient from the hospital who had had a radical mastectomy eighteen years before and who now had a cancer of the opposite breast.

An analysis as to the frequency of bilateral mammary cancer made twenty years ago showed only two to three percent of women had cancer in the opposite breast. That incidence has now increased to eight percent because a higher percentage of women have come with early cancers and are living long enough for the cancer to develop in the opposite breast.

The most precancerous disease of the breast is the breast which remains after a radical mastectomy has been done. We believe that this time is too soon, too premature for laymen and for general practitioners, too, to accept the necessity for bilateral mastectomy for cancer. A simple mastectomy on the uninvolved side, a radical mastectomy on the involved side, but I predict that this will come to pass.

In the abdomen—I only have a minute or so left—the extension of radical surgery has increased rapidly within the past decade. The liver which is an organ we considered practically inviolate in years past now lends itself to sub-total resection, a partial hepatectomy, a lobectomy or hepatomas of the liver and occasionally even for metastatic cancer of the liver, notably, melanoma is being done.

In the stomach instead of performing minute partial removals of the stomach, total gastrectomies are being done in higher percentages of cases. This is particularly true for cancers which occur in the upper segment of the stomach.

It has been shown at the Memorial Hospital by clearing experiments by Dr. Sunderland in the department of pathology, that forty percent of these patients with cancer in that location had metastasis in the lymph nodes along the superior margin of the pancreas and in the splenic pedicle. These people were having total gastrectomies performed at this time. These results also have been predicted by study the flow of a colored dye we injected into the stomach to note the flow in the stomach.

In advanced cancer of the uterus that are beyond the scope of the so-called radical hysterectomy, or for cancer of the rectum that involve the multiple pelvic organs, surgeons throughout the country are carrying out the operation of pelvic exenteration in which the bladder, the vagina and the rectum are all removed in toto. Some of these patients are approaching the period of five-year survival.

In the cancers of the colon, the end results which were so good in the right half of the colon, due to the fact that one has to remove the entire right half because it has a single blood supply, as compared with the inferior results in the left half of the colon where there is an abundant blood supply, has led surgeons now to do a more radical resection of the left colon comparable in degree to that of the right colon in order to remove more of mesentery containing lymph nodes which are present therein.

One word also about cancer of the kidney and the genitourinary organs. Not more than ten to fifteen years ago, the average cancer of the urinary bladder was treated by fulguration, and the genitourinary surgeons these days are about as radical as we find in any other of the surgical experiments and they are attempting the same radical procedures, removing the organs in their entirety and trying to reconstruct the urinary system to form receptacles to function as a substitute urinary bladder.

I think one of the dramatic improvements that has occurred in cancer surgery has been in cancers of the kidney occurring in children, and Dr. Farber, who is here today, with Dr. Gross, has been responsible for this great improvement.

We reported a large series of these Wihlms cancers in children, and now when the diagnosis is made, and this policy was established by Dr. Gross, it is considered an emergency and that child is taken immediately to the operating room and a transperitoneal nephrectomy is performed and the next day post-operative treatment is started at once.

I am of the opinion that that should apply to cancers all throughout the body. We never know on what day that cancer may get into the vascular system and metastasize to different parts.

I think if the Society would wish a new statement to use for the coming year, or the coming two years, that it might well adopt this slogan, "Cancer is an Emergency," and that everyone connected with its treatment should consider it as such and act accordingly.

PROGRAM

Fifth Annual Assembly ARKANSAS ACADEMY OF GENERAL PRACTICE

Hotel Marion, April 19, 1953

1:00—Registration—Lobby

SCIENTIFIC PROGRAM

Ball Room

2:00—Opening of Assembly—

Dr. Harry Murry, President Arkansas Academy of General Practice

2:10—"The Indications, Limitations, and Hazards of Menopausal Estrogen Therapy"—Dr. Emil Novak, Johns Hopkins University

3:00—Film: "Special Problems in the Management of Peptic Ulcer"—Wyeth, Incorporated

3:30—"Some Aspects of Anemia"—Dr. John B. Youmans, Vanderbilt University

4:20—Film: "Tele-Clinic" No. 4: The 1952 American Academy of General Practice

4:40—Business and Adjournment

SOCIAL PROGRAM

Continental Room

Wives and Friends Invited

6:00—Cocktail Hour—

Courtesy Wm. T. Stover, Inc.

7:00—Banquet—

Dr. Harry Murry, Master of Ceremonies

Principal Speaker: Mr. Virgil Blossom, Eminent Arkansas Educator

A Few New Tricks: Dr. John McCollough Smith
Installation of Officers for 1953-54

Door Prizes—

Courtesy of Central Surgical Co., Inc.

EDITORIAL

ANNUAL SESSION

The annual session of the Society will be held at the Hotel Marion, Little Rock, April 20, 21 and 22. The full program for the scientific session has previously been published in The Journal and additional bulletins descriptive of the addresses have been mailed to all members. The scientific session promises to be excellent. Commercial exhibits unfortunately restricted because of space limitations, will be occupied by several firms who have exhibited with the Society for many years. The annual social evening will be held Tuesday, April 21. It is hoped that a large majority of the membership will make their plans to attend. Hotel reservations should be made in advance.

APRIL IS CANCER MONTH

During April, the Arkansas Division, American Cancer Society, makes its annual campaign for funds with which to finance its program of education, service and education within the state. In the past year the activities of this volunteer health agency have expanded until there is now an active county organization functioning in each county of the state manned by volunteer workers. This agency was established at the direct request of the Council of the Arkansas Medical Society to the Auxiliary and its worth as an educational public program has been attested to over the years by the increasing numbers of the public who have become acquainted with the problem of cancer as an individual one. Members are urged to assist the Cancer Society in its campaign, not overlooking their personal contribution to the fund.

DID YOU GET AN INVITATION TO JOIN?

The credulity of physicians is legendary. Slickers, salesmen and an odd assortment of individuals with glittering deals make fair prey of the doctor.

Of fairly recent origin, but becoming extensive in its application, is the invitation to affiliate with an organization which alleges to select its fellows and members for distinguished service as physicians, offers varying services, but, most important, publishes some sort of a roster listing these prominent individuals in the profession. The names by which these are known vary with the plan and the promoter but the common denominator is the offer of membership and the attendant fee.

On a resolution introduced by the Arkansas Medical Society a number of years ago, the American Medical Association declared listing in a commercial directory to be unethical. This has



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had the effect of producing these organizations which now offer membership instead of the former crude charge for a listing in a directory.

The American Medical Association, the Arkansas Medical Society and the reputable specialty societies publish a roster of their members. The payment of a fee by a physician for membership in an organization which appears but to be a scheme for the benefit of the promoters should be studiously avoided by all physicians.

CANCER CURES TO BE EMPHASIZED DURING APRIL CAMPAIGN

Units of the Arkansas Division, American Cancer Society, plan to emphasize the cured cancer patient during their annual campaign for funds in April. The fact that more than 70,000 patients were saved from a cancer death last year, point up the need, not only for more money to be used in the field of research, but for a greater understanding of the problem of cancer and the accepted means of combatting it with X-ray, radium, and surgery.

A number of counties are planning a "Cured Cancer Patient" luncheon or dinner, under the sponsorship and financed by members of the local medical societies.

All county units are being asked to seek the approval and cooperation of their own County Medical Society, in order that proper publicity may be received.

SPARKS FROM THE SECRETARY

February 11, 1953. For the past couple of weeks, even to the point of having a meeting last night, the officers and council have been very busy on the Medical Center Bill. After having a few meetings with my own Senator, Y. M. Mack, I have come to appreciate him more than ever as a quiet but very thoughtful man.

Today my much better half, Mac, had a couple of toes operated on by Carruthers in Little Rock and although she has been a graduate nurse she is getting used to another view of hospitalization in St. Vincent's.

February 15, 1953. After many letters between us, the members of the Constitutional Revision Committee, met in Fort Smith to settle some points of understanding about some constitutional changes. No one could imagine a committee more genial to work with and more industrious. The only four who could be there were Dr. Jim Kolb of Clarksville and Dr. Jack Butt of Fayetteville and Dr. Coy Kaylor of Fayetteville and myself. However, we have had splendid cooperation from Dr. Dickinson from DeQueen who was ill, and from Dr. Noble Daniels from Texarkana, whose previous plans prevented his attendance at this meeting. About five hours of solid work was put in by the committee, although yours truly was delayed by a late Braniff plane.

Brooksher took Kolb and me out for a steak; and I had to eat the steak before anyone else had the privilege of eating because of a rush to catch my plane back to Little Rock. Apparently the cost of the T-bone made Bill slightly ill for he went home soon afterward, although he seemed to blame it on either an allergy or cellulitis of his nose.

Anyway, I sure enjoyed the steak and the hospitality which was truly wonderful Brooksher hospitality.

February 21, 1953. At the risk of boring you, may I suggest again that the doctors in the State of Arkansas put their phone number in the professional card, because at times we wish to make a phone call to these people to talk to them about referring patients and their phone number would be very handy.

HISTORIES OF PIONEER DOCTORS IN GRANT COUNTY

Compiled by MRS. GORDON PAGE OATES

Dr. Joe T. Butler ably represented his section of the medical fraternity of Grant County. He was born in Oglethorpe County, Georgia, in 1856, son of Thomas G. and Martha A. (Stephens) Butler. Joe T. Butler was one of ten children, received his education at Butlersville. At the age of seventeen, he began the study of medicine under his father, who was already a successful physician. In 1879 and in 1880 he attended lectures at the Hospital College at Louisville, Kentucky. In 1880 he came to Grant County. He devoted his whole time to medicine. In 1876 he married Anna V. Neely of Marshall County, Mississippi. They had six children. He was a member of the Missionary Baptist Church. Also a member of the Masonic order. Being a Democrat, he served as postmaster at Grape Vine for three years. He was also in the drug business for four years, and belonged to the Grant County Medical Examining Board since its organization in 1882.

Dr. Charles U. Harrison, well known as a capable and honored physician of Grant County, was born in Dallas County, Arkansas, in 1853. He was the son of M. J. & Pauline (Harrison) Harrison. He was one of six children. Dr. Harrison received his education at St. John's College, graduating in 1874, following which he returned to his farm, remaining until 1875 when he went into the drug business at Little Rock. Here he began the study of medicine. In 1877 he entered upon a course of lectures at the Louisville Medical College, graduating the following year and in 1878 located at New Edinburg, Cleveland County, and ten years later took up his residence near White Oak. He was a member of the Methodist Episcopal Church, South, also a mason, and politically he was a Democrat. In 1878, he married Miss Elizabeth Con. of Cleveland County, Arkansas. They had one child.

Presented by the Biography Committee, Woman's Auxiliary, to the Arkansas Medical Society. Mrs. Chas. W. Dixon, Chairman.

HISTORIES OF PIONEER DOCTORS IN LONOKE COUNTY

Compiled by MRS. GORDON PAGE OATES

Dr. W. J. D. Alexander one of twelve children. He was reared on a farm in Smith County, Texas,

where he commenced the study of medicine in 1857. Later he attended the Nashville Medical College, (now known as Vanderbilt) and subsequently went to Denton County, Texas, where he entered upon the practice of his profession. He was a first lieutenant, in the Thirty-seventh Texas Cavalry, then became a Captain, and afterward a Major, so continuing until the close of the war. In 1866, induced by the attractions Arkansas offered to come here, he located in Prairie County where he practiced until 1872. Coming to Carlisle he was actively engaged in practicing, farming, and real estate business and was commissioned notary in 1883. In professional and business circles his reputation was thoroughly established. He was married in 1869, in Texas to Miss Fannie Conner, a native of Tennessee, but reared in Texas. They were the parents of two sons. Dr. Alexander was a member of the A.F. & A.M. He was a stockholder in the Carlisle Pub. Co., and was justly considered one of the leading men of the place.

Dr. John P. Fletcher was one of the county's most prominent physician and surgeon. A native of Rutherford County, Tenn., he was born in Dec. 1827, being the son of John D. and Catherine H. (Featherstone) Fletcher. John D. Fletcher came originally from Georgia and as a lad of 7 years accompanied his parents to Tenn. The Fletcher family were of English extraction and the first member in this country settled in Virginia, at an early day. John P. received all the advantages for and education that were to be had in his young days and in 1844 accepted the position of assistant teacher in Lowndes County, Alabama. His boyhood's ambition was to be a physician, and having determined to make that study his life's profession, in 1848, he began reading medicine and pursued his studies at the University of Louisiana, in which he twice matriculated. He graduated in 1873 from the Charity Hospital Medical College of New Orleans, and it was there that he received, during his hospital practice, the knowledge of the science of surgery and medicine, which had made his career so peculiarly successful. After having practiced his profession in Mississippi for some time, he moved with his family to Arkansas, locating in Lonoke County, and afterward settled in Butler Township, Lonoke County where he resided until 1889, then coming to the village of Lonoke. In June, 1845, Dr. Fletcher was married to Miss Mary A. Cooper, a native of South Carolina, who died in 1873, leaving ten children. His second marriage occurred in 1874 to Miss Martha J. Gamble, who died in '876. The doctor chose for his third wife, Miss

Permelia E. Gamble. Of the six children resulting from this union, four sons and two daughters. In politics, the doctor was a Democrat. He was an enterprising and ambitious citizen and was a member of the Masonic fraternity. He was also president of the Lonoke County Board of Medical Examiners and with his family worshiped at the Baptist Church.

Dr. S. J. Brietz, among the medical fraternity of Lonoke County, no name was more favorably known. He was born in North Carolina in November, 1847, and was one of four children resulting from the union of L. R. and Sophia (Blum) Brietz. He was given liberal advantage for schooling and after finishing the course in the common schools, he entered the University of Pennsylvania, graduating in the class of 1868. He then came to Arkansas, and located in Lonoke County, where he met and married Miss Emma McPeak, a lady of Scotch descent. Their marriage was solemnized on February 6, 1884, and they had two children. Dr. Brietz also managed a farm in connection with his practice. He held the office of justice of the peace for four terms and was recognized as one of the most popular and influential citizens of Lonoke County. The doctor and his wife belonged to the Methodist Episcopal Church.

Dr. E. S. Motter, physician and farmer of Pulaski Township, Lonoke County, was born near Frederick City, Md., in May, 1832, and was the son of J. S. and Mary (Smith) Motter, both native of Maryland. Dr. Motter grew to manhood in Maryland, receiving a good education in the high school and academies of that state, and upon completion of his literary learning took a course in medicine at the University of Maryland, and at the Medical Department of the City & Marine Hospital of Baltimore, graduating in 1854. He located in Piedmont, Virginia, where he began the active practice of medicine. In 1856 he moved to Leavenworth continuing his practice up to the beginning of the war, when he enlisted in Confederate army April 16, 1861, enrolling as a private in the seventh Virginia Cavalry. After serving in that regiment until the year 1863, he came to Arkansas and was assigned to the Tenth Arkansas Regiment being appointed regimental surgeon, in which capacity he served 'till the close of the war. After the close of the war, the doctor located at Hickory Plains, Arkansas, practicing from 1865 to 1871. In 1872 he came to Lonoke County and settled on the place he made his home and practiced his profession. He was quite an extensive farmer. On Jan. 1, 1872, he was married in Little Rock to Mrs. Anna B. (Hop-

kins) Smith. She was a native of Alabama, but educated in Arkansas. They had one daughter.

Dr. T. J. Reiff was one of Carlisle's noted physicians, born in Lancaster County, Penn., in 1834. The Reiff family came from Switzerland to the United States in the latter part of the 17th century and settled in Lancaster County. Dr. Reiff was one of fourteen children. He lived at home until after he became of age, helping his father on the farm. He commenced the study of medicine when quite young and entered college in 1853, graduating the next year. In 1857 he began practicing near the old homestead, remaining there until 1865, when he moved to Wooford County, Ill., for two years, then to Iroquois County four years. In 1871 he traveled in the South for his health and the following year located in Grand Prairie where he now resides, spending the first year on a farm which he bought and resided on in Carlisle. Dr. Reiff married in Jan., 1860, to Susan Vance, a resident of his native state. They had two children. The doctor was a member of the A.F. & A.M. and also of the Knights of Honor. He was the third northern man who located in Grand Prairie, and though a strong Republican was elected president of the Board of Supervisors, he held this office for two terms; and was twice appointed postmaster of Prairie Center a position which he declined. Though but little interested in politics, he was one of the leading Republicans of the County. He was elected mayor of Carlisle in the spring of 1885 and re-elected in the spring of 1886.

Presented by the Biography Committee, Woman's Auxiliary, to the Arkansas Medical Society. Mrs. Chas. W. Dixon, Chairman.

HISTORIES OF PIONEER DOCTORS IN POPE COUNTY

Compiled by MRS. GORDON PAGE OATES

Dr. J. W. Bruton, as a man of business, his name and fame was co-extensive with Pope County and the surrounding country. He was born in Pope County, Arkansas, on January 15, 1837, to James and Sallie (Angel) Bruton, who were born in Kentucky and Tennessee. J. W. Bruton had spent most of his life in Pope County, and notwithstanding the fact that his early advantages were poor, he had by self-application become a well-posted and intelligent man. Upon attaining his majority he began making his own way in the world, and after devoting considerable time to the study of medicine, he in 1865, began practicing that profession, but in 1886 was compelled to give up this calling on account of failing health. He then threw open to the public a general mercantile store at Appleton. Dr. Bruton was also a

minister of the gospel, and first began preaching the doctrines of the Cumberland Presbyterian Church in 1878. He was married in October, 1858, to Miss Jennie Montgomery, a daughter of John C. and Matilda (Grayson) Montgomery, by whom he became the father of seven children. Dr. Bruton volunteered in the Confederate Army in 1862, but was discharged at the end of three months on account of ill health.

J. R. Kenney, M.D., this popular and competent physician had been a resident of Dover since March, 1872, and during that time had won a reputation for ability and efficiency that is excelled by none. He was born in Lauderdale County, Ala., September 2, 1837, to John Kenney, a mechanic of that county. As his father was a tanner he learned that trade in his youth, and after he had attained his majority he began doing for himself, but made his home with his father for three years. In 1863 he entered the Confederate Army, being in Baker's company of Forrest's battalion, and while he was in no extensive engagement, he was in numerous small battles and skirmishes. On account of ill health he was sent to the hospital shortly after he entered the army, where he remained for a few weeks, and was discharged on account of disability. After his return home he began the study of medicine, which he continued under the instruction of Dr. B. F. Crittenden, of Center Star, Ala., and in the fall of 1865 he took a course of lectures in the University of Nashville, Tenn., and the following spring commenced practicing at Lexington, Ala., where he remained for two years. He then opened a tanning business in Charles County, Tenn., which he conducted in addition to his medical practice for about two years, at the end of which time he sold out his business, and went to Wayland Springs, Lawrence County, Tenn., at which place he remained until March 1, 1872, when he became a resident of Dover, Ark. He was very successful here in the practice of the healing art, and since 1883 had been the owner of 277 acres of land. He was a joint owner with J. A. Pitts, of Dover, in a grist-mill and cotton-gin, under the firm name of Pitts & Co. The doctor was a member of the Methodist Episcopal Church South, and in politics was a Democrat. He remained unmarried.

Dr. C. L. Kirkscey is the oldest physician and surgeon of Dover, Ark., and had been a resident of this county since 1874, coming from Helena, Ala. He was born on December 2, 1838, at Alamuca, Lauderdale County, Miss. His father, John M. C. Kirkscey was a farmer and stock-

dealer residing near De Sotoville and Butler, Ala., and on this farm, C. L. Kirkscey was reared to the age of fifteen years at which time he entered school at Gaston and Providence, Ala. Up to this time his advantages for acquiring an education were very limited, but his father now resolved to give him every advantage, and after remaining in that institution one year he entered the high school at Eutaw, Ala., remaining in this institution for one year also. He next became a student in the University of Alabama at Tuscaloosa, which was not only a literary but a military college, and here he remained two and one-half years. At the end of this time he entered the Confederate Army as third lieutenant and was sent to Demopolis, Ala., to take charge of a drill camp, and here he entered actual service in Co. B, Eleventh Alabama Regiment. He was in the battles of Seven Pines, Mechanicsville, Gaines' Mill, and White Oak Swamp, being wounded and taken prisoner in the latter engagement. After being sent to his home he was assigned to duty in the Commissary Department where he remained until the close of the war. He then followed school teaching for one year, at the close of which time he was prevailed upon to enter the ministry, and was a member of the Alabama conference for two years, in the Methodist Episcopal Church South. He then returned to college, where he graduated as an M.D. at the Atlanta Medical College in 1874, after which he returned to Helena, Ala., and engaged in practicing, but remained only a short time, emigrating a few months later with his family to Arkansas, and settling at Dover. He purchased a farm near the town, also some town property, and at that time there were few physicians in the country, his practice was necessarily large. During his career here he had devoted more or less attention to farming, being the owner of land during the entire time, and on his farm he has kept his sons usefully employed. In 1883 he entered into a co-partnership with D. P. Ruff in the practice of medicine and surgery, and the sale of drugs and groceries, employing a man to look after the store, but this venture proved unprofitable and they sold their stock of goods but continued to be associated in their medical practice. He cultivated both cotton and corn on his farm. His marriage, which occurred October 3, 1866, was to Miss Mary P. Grace, a daughter of G. B. Grace of Choctaw, Ala., by whom he had four sons. The doctor with his family were members of the Methodist Episcopal Church South. He had been a local preacher in that church for twenty-two years, and had done much to aid the cause of Christianity. Socially he was a member of the

A.F. & A. M. and the K. of P. and in his political views a Democrat. He had been a member of the State Medical Society since the year 1880, and had served on the committee on surgery or medicine every year.

Dr. William H. Montgomery, physician, Moreland, Ark. Dr. Montgomery, one of the many eminent practitioners in Pope County, was the son of Thomas and Jane E. (Montgomery) Montgomery, born in 1847. He was one of four children. Dr. Montgomery was educated in Louisville, Ky., until about fifteen years of age, and received his early education under difficulties, being obliged to work his way, as his father died at an early age. In 1867 he began studying medicine under Dr. Whitlock of Lafayette, Ky., but studied principally with Solomon Johnson, whom he claims as his preceptor. He opened a drug store in Harrison, Boone County, in connection with Dr. Ruth, and afterward purchased that doctor's interest, subsequently removing the stock to Jasper, Ark. He there began the practice of medicine. Although the doctor had never attended college or taken a course of lectures he was a member of the State Eclectic Medical Association, also the National Association, both of which conferred upon him honorary degrees and diplomas. He had an extensive practice, and was frequently called in consultation in all parts of this county, where his opinion and decision carried a great deal of weight. Dr. Montgomery was married to Miss Mary E. Markham, a native of Barren County, Tenn., in 1867, by whom he had seven children. Dr. W. H. Montgomery came to Pope County in 1884, purchased a farm of eighty acres upon which he erected a house, but his practice extended rapidly down the valley he purchased a forty acres in Valley Township, where he moved in 1889. His principal crops were corn, cotton and hay. Thorough in all that he does, he allows no worthy movement to drag for want of support if in his power to help it. Dr. Montgomery and wife as well as all the children were members of the Methodist Episcopal Church. He was a Mason and assisted in organizing and building up Cross Plains Lodge No. 434, having held principal offices in the lodge, and being chaplain at the present time. He was also a member of Eastern Star Lodge at Cross Plains. He was elected school director of Jasper, Ark., a position he held about eight years. He was appointed postmaster at Jasper, Ark., and held this position two years, and resigned only on account of increasing practice. In the latter part of 1863 he enlisted in the Federal Army and served about two years. He was captured at Knoxville and retained until 1864,

when he was exchanged. He then returned to his company at Big Shanty, Ga. For meritorious conduct he received a furlough, and while home was captured by guerrillas, who took him to Tennessee, where he was retained until 1865. He was wounded in the hip at Sandtown Ferry, Ga., and never received his discharge.

Dr. J. H. Potts, physician, Atkins, Ark. Dr. Potts was born at Galla Creek, in 1849 and was the youngest child born to Kirkbride and Permelia A. (Logan) Potts. He entered the medical department of the University of Louisville, Ky., in 1873 and graduated from the same two years later. He at once located in Atkins, where he was among the first physicians. He was married in 1879 to Miss Lucy Williamson, of Missouri, and they had three children. Dr. Potts was a member of the Masonic fraternity, Galla Rock Lodge No. 172, Atkins, Chapter No. 77, and was secretary of the last. He was a practical and very successful agriculturist, was very public spirited. In his profession he was very successful. He was the owner of an excellent farm of 280 acres, and has 140 acres of this under cultivation. He also had a comfortable home in Atkins.

Dr. D. P. Ruff, Jr., was a prominent member of the medical firm of Kirkscey & Ruff, of Dover, Ark., and was born in Searcy County of this state, in 1852, being the son of D. P. Ruff, Sr., a physician and farmer. Dr. D. P. Ruff, Jr., lived on the farm with his father until he was seventeen years of age, and although his opportunities for early education were rather limited, he, by close application and industry, obtained sufficient education for teaching in the public schools of his native county, and used the salary thus obtained to gain a better education, being an attendant of the Academy at Bellefonte, Boone County, Ark. After leaving there he taught another term of school, after which he entered the store of Ellensburg & McDowell, dealers in general merchandise at Marshall, Ark., in which business he was engaged for about two years. During this time his leisure moments were devoted to the study of medicine under the instruction of Dr. Wilson, and after leaving the store he devoted his entire time to this science for one year. He then went to Richland, Ark., where he formed a co-partnership with Dr. B. F. Stephens, and at that place his practice was begun. After this partnership had lasted about eight months Dr. Ruff entered Vanderbilt University of Nashville, Tenn., and after attending a course of lectures in the medical department he returned to Richland and again began practicing. Eight months later he became a

student in the University of Tennessee at Nashville, and from this institution he was graduated in 1878. The following five years were spent at Richland, but since that time he had been one of the able and talented physicians of Dover. He was in the full sense of the word a self-made man. He had a good reputation as a physician and surgeon, and had made a success of his medical practice. By his endeavors he had accumulated quite a fine property. He devoted some attention to the raising of horses and cattle. He was married on November 7, 1878, to Miss Minnie Truett, of Richland, Ark., she being a daughter of H. M. and Elizabeth Truett. They had two sons. The doctor had always been a Democrat, and was a member of the Masonic order of Dover. He took an interest in school work, as he was director in the town school. He was a member of the State Medical Association. From 1858 to 1861, when he was from six to ten years of age, he was afflicted with a diseased condition of the ear to such an extent that he was not able to attend school, and the war then coming on kept him from school for the following four years which accounts for his educational disadvantages in early life. On entering school in 1865 he was unable to read, but this state of things did not last long, for he was ambitious and was possessed with a strong desire to become an intelligent man, and made the most of his opportunities.

Dr. D. J. Warren, Atkins, Ark., was among the most talented physicians in Pope County. His parents, Charles and J. (Jones) Warren were natives of Tenn. Our subject's paternal grandfather, Burris Warren, was a native of England and came to America in Colonial times. Dr. D. J. Warren was born in Tennessee in 1828, but moved with his mother, his father being dead, to Mississippi, where he resided until 1852. He then came to Arkansas, settled in Conway County, and there entered and bought land which he cultivated for a number of years. He was married twice, first in 1855 to Miss Nancy Eubanks, a native of Arkansas, and daughter of James Eubanks. Mrs. Warren died December 7, 1858. Dr. Warren's second marriage occurred January 1, 1861, to Miss Mary A. Bernard, a native of Pope County, and the daughter of Wilson Bernard. During the unpleasantness between the North and South, or in the fall of 1861, Dr. Warren enlisted in Co. C., Tenth Arkansas Regiment Infantry, and was in the siege of Port Hudson where he was advanced to the rank of first lieutenant. Dr. Warren began the study of medicine in 1858, attended lectures in Cincinnati during 1859-60, and was assistant surgeon for fifteen months in the army before he

was promoted to the rank of lieutenant. On his return to Pope County he at once began the practice of medicine. In 1873 he was one of the first to locate in Atkins and soon bought forty acres near town. In 1881 he bought six acres in town, and erected a residence on it. The doctor with four others, erected the school house at Atkins, and he did much to advance the cause of education. To Dr. Warren's second marriage were born five children. The family were members of the Baptist Church. Dr. Warren was a member of the Masonic fraternity.

Dr. J. M. Yancey, Russellville, Ark. Among the people of Pope County the name of Dr. Yancey is a familiar one, for he practiced his profession in this county for many years. He was born in Tennessee in 1832, was reared and educated in that state, and at the age of nineteen years he began the study of medicine under a preceptor. In 1853 and 1854 he attended the Southern Botanic Medical College at Macon, now at Atlanta, and known as the Eclectic Medical College of Georgia, and graduated from the same in the winter of 1854. He at once began practicing in

Tennessee. In 1857 he was married to Miss N. M. Woodward, a native of Tennessee, and in 1858 came to Arkansas, settling in Pope County near Dover, where he bought a farm. He followed agricultural pursuits until 1862, when he entered the Confederate Army, Co. I, of King's regiment and was detailed to assist the surgeons. He served in that capacity and also had charge of supplies for the sick during the marches. He was in active service until cessation of hostilities. Upon returning to Pope County, the doctor sold his farm, moved into Dover and commenced a practice. In 1871 he moved to a farm near Russellville, and in 1886 moved to that town. The doctor owned farm land, and took a great deal of interest in grading his cattle and hogs. Dr. Yancey lost his first wife during the war, by whom he had two children. The doctor's second marriage was to Mrs. Annie M. Hays, daughter of Mr. Lydick, and to this marriage were born four children. The family were members of the Christian Church, in which Dr. Yancey was an elder. He was one of nine children born to David and Rachel Davis (Madaris) Yancey.

Presented by the Biography Committee, Woman's Auxiliary, to the Arkansas Medical Society. Mrs. Chas. W. Dixon, Chairman.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

CLINICAL AND HISTOPATHOLOGIC STUDY OF THE EFFECT OF CORTISONE AND CORTICOTROPIN ON TUBERCULOSIS

By Linden Wallner, M.D., J. Robert Thompson, M.D., and M. R. Lichtenstein, M.D., *American Review of Tuberculosis*, August, 1952.

A number of studies in animals have demonstrated that treatment with cortisone has an unfavorable effect upon tuberculosis. Trials of cortisone and corticotropin in human tuberculosis have been relatively few and have not included the histopathology of the tuberculous lesions while under this therapy. The purpose of the investigation reported here is to illustrate the effect of the hormones on the tuberculous lesion by means of biopsies of accessible mucous membrane lesions. It is presumed that the effects on tuberculous tissue should be essentially the same in these lesions as in the lungs.

Six patients with extensive pulmonary tuberculosis and sputum positive for *M. tuberculosis* were studied. All had laryngeal tuberculosis. In addition, one patient had tuberculous lesions of the hard palate with ulceration; and one had an ulcer in the region of a previously removed left tonsil.

Although markedly ill, all of the patients were able to walk. Treatment with cortisone or corticotropin was carried out for periods of 10 to 22 days. Photographs and biopsies of the lesions were made at the beginning and at the end of treatment.

The clinical condition of the patients was followed by means of studies of the temperature, weight, expectoration, and general condition. The intracutaneous reaction to tuberculin was determined before, during, and after treatment. Blood counts, special eosinophile counts, urinalyses, sputum studies and roentgenograms of the chest were performed. Data on these patients are presented at the end of this abstract.

Subjectively the patients felt better and presented evidence of mild euphoria during therapy. Cough diminished and most of the patients gained weight. Fever was absent during therapy in five cases except for an occasional slight rise but recurred when therapy was discontinued. One case had irregular fever during therapy.

The serial roentgenograms of the lungs showed some clearing of the lesions at the end of treatment in two cases. The other four patients showed no significant changes. A temporary depression of reactivity to tuberculin occurred during treatment in half of the cases.

Photographs of the lesions revealed no definite evidence of improvement in the gross pathology. Examination of biopsy material at the end of treatment revealed increased inflammatory response, lessened limitation of tubercles, and increased numbers of tubercle bacilli. No definite clinical

harm was observed in the patients in the present study as a result of the short courses of cortisone and corticotropin, nor was any difference in the effects produced by the two substances noted.

It thus appears that symptoms improved, but pathology progressed and the number of bacilli increased while under therapy with these hormones. There has been much speculation concerning the possibility of combining cortisone or corticotropin with streptomycin in the treatment of pulmonary tuberculosis. Thus far no benefit has been reported.

DATA ON SIX PATIENTS TREATED WITH CORTISONE OR CORTICOTROPIN FOR TEN TO TWENTY-TWO DAYS

CASE NUMBER	RACE, SEX, AND AGE	WEIGHT <i>pounds</i>	DAILY TREATMENT	DURATION OF TREATMENT <i>days</i>	EOSINOPHILS PER CU. MM.		EFFECT OF TREATMENT ON HISTOPATHOLOGY	GROSS APPEARANCE OF MUCOUS MEMBRANE LESION AFTER TREATMENT
					Before Treatment	After Treatment		
1	W. W., Negro male, 40 years	95	Cortisone, 100 mg. intramuscularly	14	?	3	Increased inflammatory reaction; less limitation of tubercles after treatment; no tubercle bacilli found before treatment; tubercle bacilli present after treatment	No change
2	W. R., Negro male, 37 years	102	Cortisone, 100 mg. intramuscularly	22	27	10		Worse: more swelling
3	F. A., Mexican male, 29 years	107	Cortisone, 100 mg. 200 mg.	5 10	142	110 26		No change
4	W. M. B., Negro female, 34 years	127	Corticotropin, 20 mg. intravenous drip	10	343	33	Inflammatory reaction slightly less after treatment; tubercle bacilli present before treatment (insufficient specimen for post-treatment examination for bacilli)	No significant change
5	L. K., white male, 33 years	106	Corticotropin, intravenous drip	12	153	25	Tubercles atypical after treatment, with less giant cells; more tubercle bacilli after treatment	No change
6	N. E., white male, 51 years	103	Corticotropin, 50 mg. intramuscularly	10	102	29	Increased inflammatory reaction; more tubercle bacilli after than before treatment	No change

Dihydrostreptomycin and PAS were started on August 27, 1951 and were followed by marked improvement in laryngeal symptoms. Weight increased to 137 pounds by September 17, 1951.

PROCEEDINGS OF SOCIETIES

Phillips County Medical Society has elected the following officers: President, George Gibbons; Vice-president, C. P. McCarty, and Secretary-treasurer, A. H. Berger.

The Cross-Saint Francis-Lee Counties Medical Society was addressed March 4th by B. W. Cannon, Memphis, on "Neuritis."

The Craighead-Poinsett County Medical Society was addressed March 4th by Barton Etter, Memphis, on "Practical Aspects of Convulsions in Children."

J. H. McCurry, Secretary.

Johnson County Medical Society has elected the following officers: R. H. Manley, President; Earle H. Hunt, Vice-president; James M. Kolb, Secretary-treasurer; Guy Shrigley, Delegate, and W. R. Scarborough, Alternate.

Monroe County Medical Society has elected the following officers: Herd Stone, President; Jere Long, Vice-president; J. P. Williams, Secretary-treasurer; E. D. McKnight, Delegate, and Ben Pupsta, Alternate.

The Ouachita County Medical Society was entertained in dinner session March 5th by Rowland R. Robins at the Camden Hotel. The following program was presented: "Fractures of the Pelvis," R. M. Logue, and "Fractures of the Hand," John D. Christian, both speakers of Little Rock. A motion was adopted approving the invitation of the editors of U. S. NEWS AND WORLD REPORT for an interview with R. B. Robins on "The Family Doctor and What He Means to the American People," this action taken in accord with paragraph 3, section 5, chapter I of the Principles of Medical Ethics which states: "A physician who desires to know whether, ethically, he may engage in a project aimed at health education of the public should request approval of his county medical society."

Participants in the postgraduate course in pediatrics held at the University of Arkansas School of Medicine, March 9th and 10th, were Eleanor Stafford, Alice Beard, B. P. Briggs, N. J. Johnson, M. Hara, Katherine Dodd, I. Meschan, W. G. Lawson, Frances Brennecke, F. S. Forman, J. W. Headstream, E. F. Erwin, and the guest speakers, Richard W. Blumberg, Atlanta, and Ben H. Nicholson, Oklahoma City.

PERSONALS AND NEWS ITEMS

J. J. Monfort and Charles Taylor, Batesville, recently conducted a diagnostic cancer clinic at Evening Shade under the sponsorship of the county medical society and the Arkansas Division, American Cancer Society.

D. W. Goldstein, Fort Smith, attended the Louisiana Dermatological Society at New Orleans February 27th and 28th.

J. Max Roy, Forrest City, recently addressed the PTA on cancer and exhibited the motion picture film on self-examination of the breast.

A contribution to the American Medical Education Foundation was received in January from John A. Martin, Trumann.

Robert Hood, Russellville, has been appointed a member of the Board of Trustees of Arkansas Tech.

John H. Wilson, Magnolia, has been appointed a member of the Board of Trustees of Southern State College.

Jabez Jackson has been elected president of the Newport Rotary Club.

B. T. Johnson has joined the Crawley-Cogburn Clinic at Forrest City.

V. D. Smith is now associated with Eli Gary at Arkadelphia.

L. D. Massey has been named "Man of the Year" by the Osceola Chamber of Commerce.

H. K. Baldrige has joined the Saltzman Clinic at Mountain Home.

Henry Durst has located for practice at Caraway.

Gilbert D. Jay III has been named "Man of the Year" at West Memphis.

Hayden C. Nicholson recently addressed the Pine Bluff Kiwanis Club on "Needs and Ideas for a Medical Center for the State of Arkansas."

R. B. Robins, Camden, recently addressed the Texarkana Kiwanis Club.

L. A. Whittaker and Ben H. Pride, Fort Smith, have moved to new offices at 321 and 323 North 13th Street, respectively.

I. Meschan, Little Rock, addressed the recent postgraduate course in radiology at the University of Kansas on "The Radiology of the Heart" and "The Radiology of the Spine."

Katherine Dodd, Little Rock, recently addressed the New Orleans Postgraduate Medical Assembly on "Typhoid Fever and Other Salmonella Infections in Childhood."

Anderson Nettleship, Little Rock, recently addressed the Kurt Mead Class of 1888 Fund of the Woman's College of Pennsylvania on "A View of What Primitive Man Thought of Disease."

R. E. Schirmer, Fort Smith, has been advanced to fellowship in the American Academy of Allergy.

Euclid M. Smith, Hot Springs National Park, has been appointed to the Board of the State Hospital for Nervous Diseases.

Among those in attendance at the New Orleans Postgraduate Medical Assembly were: Earle H. Hunt, Clarksville; A. F. Hoge, Fort Smith; M. C. Cranfall, Wilmot; C. G. Leverett, McGehee, and Brian B. Barlow, Dermott.

Barney P. Briggs, Little Rock, has been appointed state chairman of the Easter Seal campaign.

M. C. Hawkins, Jr., Searcy, recently addressed The Business and Professional Women's Club.

D. B. Stough, Hot Springs National Park, has been appointed as Garland County Chairman, Easter Seal campaign.

A. A. Hughes has located at Conway.

Paul Hoover, Little Rock, addressed the Bauxite Lions club February 23rd on "A Word Picture of Hiroshima."

D. W. Goldstein, J. D. Olson and W. R. Brooksher, Fort Smith, conducted a diagnostic cancer clinic at Fayetteville March 5th under the sponsorship of the Washington County Medical Society and the Arkansas Division, American Cancer Society.

G. D. Murphy, Jr., El Dorado, state commander of the American Legion, recently addressed the El Dorado Council of Social Agencies and District Four, American Legion, at Imboden.

H. E. Mobley, Morrilton, recently addressed the Lions club on "The Evolution of Medicine in Conway County."

BOOK REVIEW

Injuries to the Nervous System: By Donald Munro, M.D., F.A.C.S., Assoc. Professor of Neurosurgery, Boston University School of Medicine, 284 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1952. Price \$7.50.

This work has been written primarily for the general surgeon and the general practitioner. The author seeks to afford a concise source of information to those who are confronted with the problems of management and treatment of acute neurological trauma. In addition, special attention is paid to the alterations and changes that may be expected during the course of treatment and gives a new insight into the valuation of end results. Consideration is given to practical measures, e.g., surgical emergencies that frequently arise. One-fifth of the work deals with the subject of the genitourinary tract, bowel and rectum. Attention is given to the competent rehabilitation of the neurological patient who needs extensive care; social and financial factors loom large in the handling of such cases, requiring concentrated effort on the part of the hospital management.

Practical Dermatology for Medical Students and General Practitioners: By George M. Lewis, M.D., F.A.C.P., Professor of Clinical Medicine (Dermatology), Cornell University Medical College; Attending Dermatologist, The New York Hospital; Secretary, the American Board of Dermatology and Syphilology. 328 pages with 99 figures. Philadelphia and London: W. B. Saunders Company, 1952. Price \$7.50.

An excellent, concise text for medical students and general practitioners.

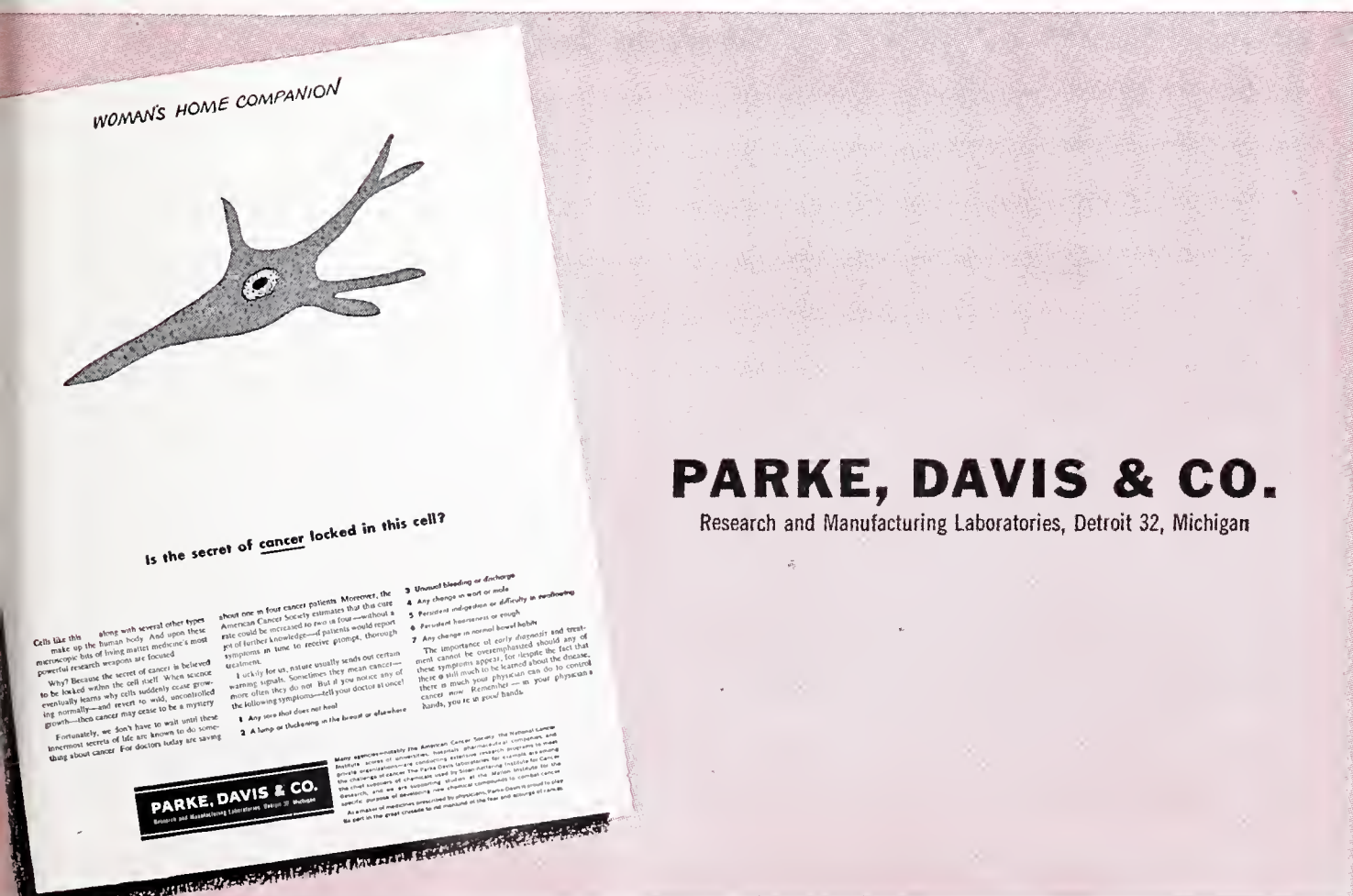
Treatment of Mental Disorder: By Leo Alexander, M.D.; Director, the Neurobiological Unit, Division of Psychiatric Research, Boston State Hospital, and Instructor in Psychiatry, Tufts Medical School. 507 pages with 143 figures. Philadelphia and London: W. B. Saunders Company, 1953. Price \$10.00.

This book will have its greatest appeal to neuropsychiatrists or those particularly interested in the specialty. The author seeks to tabulate his findings in the care and treatment of 38,000 cases of mental disorder, most of whom were suffering from schizophrenia. A small portion of the work is devoted to formalized psychotherapeutic procedures. Prefacing this is a sociological and historical development of the subject. Emphasis appears to be placed on the physical and medicinal aspects of treating mental illness. There is much detailed information on the type of and responses to different physical procedures and the author compares statistically one treatment and combinations of treatments to a satisfactory response. The chapter on treatment of intoxication of external origin will prove interesting to all physicians.

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THE Journal OF THE Arkansas Medical Society

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The JOURNAL

OF THE ARKANSAS MEDICAL SOCIETY

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SOLITARY PELVIC KIDNEY

Report of a Case and Review of Literature

RALPH A. DOWNS, M.D.*, and EDGAR BURNS, M.D.**

The purpose of this paper is to report a case of solitary pelvic kidney and to evaluate from a surgical, obstetric and urologic standpoint all cases reported in the literature. Solitary pelvic kidney is a rare enough condition to warrant report of another case. It has been estimated by Stevens¹ that a solitary pelvic kidney occurs once in 22,000 persons. A review of the available world literature through February, 1952, reveals only 73 reported cases (Table I). The following case would therefore be the seventy-fourth.

Report of Case

A white girl, aged 16 years, was admitted to the Huey P. Long Charity Hospital in October, 1951, for investigation of amenorrhea, her only complaint. She had never menstruated nor had she ever had abdominal cramps. Her body, including the breasts, was well developed and there was female distribution of pubic hair.

The only abnormalities on physical examination were complete absence of the vagina and a pelvic mass which was at first thought to be the uterus. The clitoris and labia were normal and the meatus was in the normal position.

Routine hematology, blood chemistry studies and blood serology revealed nothing abnormal. Urinalysis yielded entirely negative results. There were no cellular elements in the sediment and a stain of the sediment with methylene blue revealed no bacteria. An artificial vagina was constructed and a Young's rectal dilator was left in the space created between the bladder and rectum. During her convalescence intravenous pyelograms were made solely because of the theoretic possibility of associated renal anomalies. The fifteen-minute intravenous pyelogram (Fig. 1) showed absence of kidneys in the lumbar region and accumulation of dye within the bony pelvis. The retrograde pyelogram (Fig. 2) showed this to be an uncomplicated solitary pelvic kidney. Cys-



Fig. 1

15-minute intravenous pyelogram showing solitary pelvic kidney



Fig. 2

Retrograde pyelogram revealing solitary pelvic kidney

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** From the Department of Urology, Extension Division, Tulane University of Louisiana, School of Medicine, New Orleans.

NOTE—Because of space limitations the authors' bibliography has been omitted in The Journal. It will appear in the authors' reprints.

toscopy revealed absence of the left orifice and left half of the trigone. The right orifice was normal and in the usual position. The bladder was otherwise normal.

The patient was discharged with Young's dilator in place. She was advised to return for an exploratory laparotomy to determine whether or not there was a uterus, and, if there was, whether it would be possible to connect it to the newly formed vagina. However, because of the history, she was believed either to have no uterus or only a rudimentary organ.

Review of Literature

Although 74 cases are too few from which to draw reliable statistical conclusions, an analytical study of these cases revealed several factors of clinical significance (Table I).

Sex: The condition is apparently encountered, only slightly more often in females than in males. Of the 60 cases in which the sex was designated, 32 were females and 28 males.

Associated Congenital Anomalies: Solitary pelvic kidney is frequently associated with other congenital anomalies. In almost half (48.4 per cent) of the 74 cases there were associated congenital anomalies. Anomalies of the genitalia were the commonest; 31 or 45 per cent of the 74 patients in this series had associated genital anomalies. These were commoner in the females than in the males. Of 32 females 22, or 65 per cent had anomalies of the genitalia, 18, or 56 per cent had atresia of the vagina and 4 had uterine or adnexal anomalies, with normal vaginas. Counseller and Sluder⁷⁰, in a review of 15 cases of absence of

TABLE I

Author	Age Sex	Signs, Symptoms and Clinical Diagnosis	Associated Congenital Anomalies	Disposition	Urologic Findings	Results
Henot (2) 1830	8 mo. fetus		No sex organs, cloaca Extrophy of bladder	Autopsy	Rt. solitary pelvic kidney	
Merier (3) 1854	47	CA. of left hypochondrium	None	Autopsy	Rt. solitary pelvic kidney	
Watson (4) 1874	Adult male		None	Autopsy	Hydronephrosis of left sol. pelvic kid.	
Polk (5) 1883	19 F	Pain L.L.Q. Enlarged uterus or ovary	No uterus, vagina or clitoris	Explor. lap. & rem. of solitary kidney	Left solitary pelvic kidney	Death due to uremia
Hebb (6) 1885	6	Acute pulmonary TB		Autopsy	Hydroureter Rt. sol. pelvic kidney	
Guelmi & Ciniselli (7) 1887	10 F		No vagina or broad ligament Ectopic ovary	Autopsy	Left solitary pelvic kidney with hydroureter	
Strube (8) 1894	1 mo. F		Ano-vesical atresia	Operation for anal atresia	Rt. solitary pelvic kidney	Death 1 mo. post-op.
Barbier & Broussolle (9) 1895					Rt. solitary pelvic kidney	
Chretien (10) 1895	3 mo.	Pulmonary TB		Autopsy	Rt. sol. pelvic kid. with hydroureter	
Buss (11) 1899	21 F	Amenorrhea Abd. mass Ovarian tumor	Absence of vagina	Explor. lap. Rem. of solitary kidney	Solitary pelvic kidney	Death due to uremia
Dufour (12) 1904	F Grav I Para I	Abd. mass ? Tumor	None	Explor. lap. Partial Removal of single kidney	Rt. solitary pelvic kidney	Death due to uremia
Winter (13) 1905		Abdominal mass	None	Explor. lap. Rem. of only kidney	Rt. solitary pelvic kidney	Death due to uremia
Cullen (14) 1910	17 F	Amenorrhea Abd. mass Enlarged uterus		Explor. lap.	Rt. solitary pelvic kidney	Not given
Cutore (15) 1910	15 mo. F		Absent vagina, uterus and tubes. Rudimentary ovaries	Autopsy	Stone in dilated ureter. Solitary pelvic kidney	
Gaitschmann (16) 1910	30 F	Abdominal mass	Bicornate uterus	Explor. lap.	Solitary pelvic kidney	
Rolleston (17) 1916	14 M		Mentally deficient	Autopsy	Solitary pelvic kidney	Death due to scarlet fever
Schultz (18) 1918	18 M	Urinary retention Bladder tumor	None	Explor. lap. Biopsy of kidney	Left solitary pelvic kidney	Death 1 week post-op.
Judd & Harrington (19) 1919			Anomaly of duodenum	Explor. lap.	Left solitary pelvic kidney	Not given

TABLE I—Continued

Author	Age Sex	Signs, Symptoms and Clinical Diagnosis	Associated Congenital Anomalies	Disposition	Urologic Findings	Results
Judd & Harrington (19) 1919				No surgery	Rt. solitary pelvic kidney with dupl. of renal pelvis	Not given
Day (20) 1924	20 F	Pelvic pain Enlarged uterus	No vagina, uterus, or left ovary	Explor. lap. Open g of single kidney	Rt. solitary pelvic kidney	Living
Roeder (21) 1925	24 F	Amenorrhea. Pain R.L.Q. Appendicitis	No vagina, uterus, or left adnexa	Appendectomy	Rt. solitary pelvic kidney	Living
Bitschal (22) 1925	20 F	Fever, pyuria, ovulitis	Absent vagina	No surgery	Rt. solitary pelvic kidney	Living
Idel (23) 1927	34 F Grav. 7 Para 7	Pelvic mass blocking delivery		Cesarean section and removal of single kidney	Solitary pelvic kidney	Death due to post-op. hemorrhage
Bratrud (24) 1929	48 M	R.L.Q. pain. Pyuria Appendicitis	None	Dilatation of ureter	Hydronephrosis of rt. sol. pelvic kid.	Living
Hennessey (25) 1929	19 F	Amenorrhea, chills, fe- ver, pyuria, hematuria, hydronephrosis		No surgery	Pyonephrosis of left solitary pelvic kidney	Death due to renal failure
Tachot (26) 1931	44 F	Low backache, Pyuria, Renal stone	Absent vagina	Transperitoneal nephrolithotomy	Stone & hydrone- phrosis of left sol. pelvic kidney	Living with urinary fistula
Gutierrez (27) 1933	32 F	Abdominal pain Uremia	Hypothy- roidism	Ureteral dilatation	Hydroneph. Rt. sol. pelvic kidney	Death due to uremia. Age 35
Riley (28) 1935	F Grav. 1 Para. 1	Dystocia due to pelvic kidney	None	Cesarean section	Solitary pelvic kidney	Postpartal eclampsia Living
Nesbit (29) 1935	8 M	Urinary retention Suprapubic mass Pelvic kidney	None	Nephrostomy	Hydronephrosis of solitary pelvic kidney	Living
Shoirt & Spektorova (30) 1936						
Stevens (1) 1936	31 F	Amenorrhea, Pain R.L.Q.. Single kidney	Rudimentary vagina	No surgery	Rt. solitary pelvic kidney	Living
Stevens (1) 1936	30 M	Pain R.L.Q., Pyuria and hematuria, Renal stone	None	Uretero- lithotomy	Rt. sol. pelvic kid. Ureteral stone	Death due pneu. 5th post-op. day
Kuzmenko (31) 1936						
Hautappel (32) 1937	68 M	Loin pain Ureteral stone	None	Uretero- lithotomy	Rt. sol. pelvic kid. with ureteral stone	Death due pneu. 5th post-op day
Fuchs (33) 1938	F Grav. 1 Para. 0	Dystocia due to pelvic mass		Cesarean section and hysterectomy	Solitary pelvic kidney	Living Baby dead
Mayers (34) 1940	33 M	Solitary kidney	None		Rt. solitary pelvic kidney	Living
Ogden & Maltry (35) 1940	17 F	Amenorrhea, Abd. pain & mass Enlarged uterus	No vagina, uterus or tubes	Exploratory laparotomy	Rt. solitary pelvic kidney	Living
Planas & Fablet (36) 1940	31 F	Uterine fibroids	None	No surgery	Solitary pelvic kidney	
Hernandez (37) 1940					Solitary pelvic kidney	
Ockerblad & Carlson (38) 1940	36 F Grav II Para II	Low backache and pyuria	Absent left tube and ovary	Autopsy	Rt. solitary pelvic kidney Hydronephrosis	Death due to uremia Age 36
Bertola & Bernan (39) 1941			Bony and genital anomalies			
McCrea (40) 1942	33 M	Uremia	Epididymis in abd. Rt. undesc. testicle	Autopsy	Rt. sol. pelvic kid. Hydronephrosis	Death due to uremia
Goldberg & Fowler (41) 1942	51 M		None	No surgery	Rt. solitary pelvic kidney	Living

TABLE I—Continued

Author	Age Sex	Signs, Symptoms and Clinical Diagnosis	Associated Congenital Anomalies	Disposition	Urologic Findings	Results
Wienstock & Keesal (42) 1943	22 M	Hematuria Renal TB	None	No surgery	Rt. solitary pelvic kidney with TB	Living
Lowsley & Menning (43) 1944	7 M	Pyuria Solitary kidney	Bilateral undescended testicles	Nephropexy Re- Impl. of ureter into bowel	Rt. solitary pelvic kidney with hydronephrosis	Living
Nichols & Marr (44) 1945	20 F	Amenorrhea Pelvic mass Ovarian cyst	No uterus, ovary or tubes	Exploratory laparotomy	Rt. solitary pelvic kidney	Not given
Miller, Wilson & Collins (45) 1945	F	Enlarged uterus	No vagina or uterus	Vaginoplasty	Left solitary pelvic kidney Hydronephrosis	Living
Hess & Wright (46) 1945	42 M	Headache and vertigo Pyuria	Absence of right testicle Deformed finger	Pyelocys- totomy	Left solitary pelvic kidney Hydronephrosis	Living
Varnek (47) 1946	28 F	Abd. mass and pain Pyuria, Ovarian cyst	No left tube or ovary	Explor. lap. Ureterolithotomy	Rt. sol. pelvic kid. Ureteral stone	Living
Goodhope (48) 1946	57 M	B. P. H., Acute retention	None	Cystotomy		Death 1st post-op. day. ? Cause
Zucker (49) 1946	20 M				Rt. solitary pelvic kidney	Living
Mays (50) 1946	29 M	R.L.Q. pain, Fever Appendiceal abscess		Exploratory laparotomy	Rt. solitary pelvic kidney	Living
Schreiber & Smith (51) 1946	F	Amenorrhea	No vagina or uterus	Explor. lap. Vaginal plastic	Left solitary pelvic kidney	Living
Hanley & Steel (52) 1946	43 M	Suprapubic pain, Dysuria, Pyuria	None	Uretero- lithotomy	Left solitary pelvic kidney Ureteral stone	Living
Hanley & Steel (52) 1946	9 F	Lower abdominal mass & tenderness Pyuria	No vagina, uterus or adnexa Dextrocardia	Exploratory laparotomy	Left solitary pelvic kidney	Living
Brady (53) 1948	F	Amenorrhea Enlarged uterus	No vagina uterus	Vaginoplasty	Solitary pelvic kidney	Living
Beneventi (54) 1949	48 M	Low backache, Pyuria Single kidney		No surgery	Rt. solitary pelvic kidney	Living
Cokely (55) 1949	42 M		Hypospadias		Left solitary pelvic kidney	Living
Wall & Lowry (56) 1949	18 F Grav. I Para O	Lower abdominal mass and pain		Spontaneous abortion	Solitary pelvic kidney	Living
Handbury (57) 1949	50 M	Septicemia		Autopsy	Solitary pelvic kidney	
Nalle & Crowell (58) 1949	34 F	Lower abdominal mass and pain Dyspareunia	Absence of vagina	Vaginoplasty	Rt. solitary pelvic kidney Dilated urethra	Living
Berg & Kearns (59) 1949	39 M	Lower abdominal mass	None	No Surgery	Rt. solitary pelvic kidney	Living
de Favento (60) 1949	20 M	Hematuria Pulmonary TB	Left undescended testicle	Exploratory laparotomy	Left solitary pelvic kidney. Tuberculosis	Living at age 21
Kunstadter & Shapiro (61) 1949	21 mo. M	Nephritis		Explor. lap. Uretero- plasty	Left solitary pelvic kidney Hydronephrosis	Living
Keitzer (62) 1950	27 F	Low abdominal pain & mass, Dyspareunia	No vagina	Vaginoplasty	Rt. solitary pelvic kidney	Living
Hawes (63) 1950	22 M	Pain and mass in R.L.Q. Pyuria	None		Left solitary pelvic kidney	Living
Hawes (63) 1950	43 M	Pain & tenderness I.L.Q.	Spermatocele	Transurethral meatotomy	Left sol. pelvic kid. Ureteral stone	Living Passed stone
McKenzie (64) 1950	20 F Grav. I Para I	Dystocia due to ovarian cyst	None	Forceps delivery	Left solitary pelvic kidney	Mother and child living

TABLE I—Continued

Author	Age Sex	Signs, Symptoms and Clinical Diagnosis	Associated Congenital Anomalies	Disposition	Urologic Findings	Results
Diamantis (65) 1950	19 F	R.L.Q. pain Appendicitis	No vagina	Exploratory laparotomy	Rt. solitary pelvic kidney	Living
Cowen (66) 1950	59 M	R.L.Q. pain & mass Tenderness		No surgery	Rt. solitary pelvic kidney	Living
Gregoir (67) 1951	56 M	Painless terminal hematuria. Polycystic single kidney	Wolffian cyst of bladder	Rovsing operation	Rt. solitary pelvic kidney with poly- cystic disease	Living
Brembock (68) 1951		Hirschsprung's symptoms	None		Solitary pelvic kidney	
Golden (69) 1951	58 M	Low abdominal pain and low backache	Spermatocele	No surgery	Rt. solitary pelvic kidney	Living
Downs, et al. 1952	18 F	Amenorrhea	No vagina	Vaginoplasty	Left solitary pelvic kidney	Living

the vagina, reported solitary kidneys in 6 and ectopic kidneys in 2.

Of the 28 males only 9, or 32 per cent had associated congenital anomalies; 7, or 22 per cent, had abnormal genitalia. Four had undescended testicles, 2, spermatoceles and one hypospadias.

The high incidence of genital anomalies associated with solitary pelvic kidney in females, as well as a relatively low incidence in males, can be explained on an embryologic basis. This is brought about by the ipsolateral failure or maldevelopment of the Wolffian and Mullerian ducts. The Wolffian duct contributes to formation of the ureter and the drainage system of the kidney in both sexes. In the male it persists caudally to form the seminal vesicles, vas deferens and ducts of the epididymis; in the female it forms only rudimentary sexual organs, that is, the paroophoron ducts, the epoophoron and Gartner's duct. In contradistinction, the Mullerian duct forms, in the female, the vagina, uterus and adnexa, whereas in the male it atrophies and forms only vestigial sexual organs, that is, the prostatic utricle, appendix of the epididymis and appendix of the testis. Thus, unilateral failure of the Mullerian duct would produce obvious deformities of the reproductive organs in the female, whereas in the male the deformity would be insignificant from a functional and anatomic standpoint, and would probably not be detected on routine physical examination. This suggests that the incidence of deformities due to Mullerian duct failure would be identical in both sexes, but they are usually not detected and are of no clinical significance in the male.

The reason for this coordinated failure of the Wolffian and Mullerian ducts on one side is not well understood, since both have different origins. However, it is known, that at one time in early fetal life, the two ducts are closely applied to

each other in the lateral cell mass. It is possible that the normal development of the Mullerian duct depends on the presence or normalcy of the Wolffian duct, which precedes the former in appearance by several weeks.

In cases of solitary pelvic kidney in which there is a rudimentary ureter but no renal mass, the high incidence of associated genital anomalies would not be expected, since this is due not to developmental failure of the Wolffian duct, but rather to failure of the nephrogenic blastoma or of the blood supply of the kidney to form. Of the 74 cases in which cystoscopic observations were recorded, the majority had absence of the orifice and ureter on the side of the absent kidney. Consequently, it is believed that most cases are due to true renal agenesis. Lowsley and Kirwin¹¹ pointed out that it is important to differentiate between renal agenesis and renal aplasia, in that the former is always associated with absence of the ipsolateral adrenal gland. However, recent studies have shown this not to be the case. Bowden¹² reported 5 cases of solitary kidney in which autopsies revealed presence of the adrenal in the normal position on the side where the kidney was missing. There is no embryologic reason why the corresponding suprarenal gland should be absent since the medulla of the adrenal is derived from the sympathetic nervous system and the cortex from the mesoderm, but not from the Wolffian duct.

Diagnosis: The signs and symptoms in the 52 cases in which these were recorded are enumerated, in order of frequency, in Table II. The correct clinical diagnosis of solitary pelvic kidney was made only 31 times. Of the cases in which the incorrect diagnosis was recorded the diagnosis of ovarian tumor was made 11 times, enlarged uterus 5 times, and appendicitis 4 times.

TABLE II

Symptoms and signs in 74 collected cases of solitary pelvic kidney in order of frequency.

Symptom or Sign	Cases
Amenorrhea	21
Abdominal or pelvic mass	18
Abdominal pain	17
Dystocia	6
Chills and fever	5
Hematuria	4
Backache	3
Dyspareunia	2
Urinary symptoms	2
Acute retention	2
Partial intestinal obstruction	1

Surgical Procedures: Twenty of the 74 patients in this series underwent unnecessary exploratory laparotomies which resulted in 6 deaths, a mortality rate of 30 per cent. Five deaths were due to removal of the solitary kidney, and one was due to a non-uologic postoperative complication. Thirteen uologic operations were performed to correct the various complicating lesions after the diagnosis of solitary pelvic kidney had been made. Four of these 13 died, a mortality rate of 30.8 per cent. Five patients had operations for stones, 2 had dilation of the ureter, and one each had pyelocystotomy, nephropexy, nephrostomy, ureteroplasty, Roving operation for polycystic disease, ureteral meatotomy and suprapubic cystotomy. The operative mortality rate in these cases was 29.6 per cent.

Obstetrical Significance: Of the 32 women, 7 were able to become pregnant, and they had a total of 14 pregnancies. Two of the mothers had multiple pregnancies and the remaining 5 had single pregnancies. Three of the 7 women died of renal failure which was definitely precipitated by the pregnancy; the two women who had multiple pregnancies were in this group. Of the 4 women who survived, one had an abortion at three months, one had postpartal eclampsia following cesarean section, one had severe dystocia with delivery of a stillborn and one had a difficult labor which necessitated a high forceps delivery and postpartal hysterectomy. Of the 14 pregnancies, 12 living babies were born; 9 were delivered vaginally and 3 by cesarean section. The maternal mortality was 42.8 per cent and none of the 4 re-

maining mothers went through her pregnancy with impunity.

Anderson, Rice and Harris⁷³ reviewed the records of 98 pregnant women with pelvic kidneys, only 5 of whom had solitary kidneys. They reported an overall fetal mortality of 16.7 per cent and a maternal mortality rate of 10.2 per cent. In patients in whom the entire functioning renal tissue was in the pelvis, the maternal mortality was many times greater than it was in those who had a normally situated mate. They concluded that most pregnant women with ectopic kidneys may deliver vaginally but if all the renal tissue lies within the bony pelvis, cesarean section should be done. In agreement with this, a pregnant woman who is known to have a solitary pelvic kidney should not be allowed to go into labor but should be delivered by cesarean section.

Pathology: In the 68 cases in which the pathologic status of the solitary pelvic kidney was recorded, there were 32 diseased kidneys, an incidence of 45.6 per cent (Table III). Obstruction to

TABLE III

Urologic complications in 74 collected cases of solitary pelvic kidney.

Complication	Cases
Hydronephrosis and hydroureter	
(a) Due to ureteral stricture	11
(b) Due to prostatism	1
Urinary tract infection	10
Stones	7
Tuberculosis of the kidney	2
Polycystic disease	1
—	—
Total	32

the flow of urine was the underlying pathologic process in the majority of cases. Because of non-rotation, fixation due to the aberrant blood supply, and the crowded space in which the kidney lies, it was the rule rather than the exception for the kidney to be in such a position as to prevent optimum dependent drainage. The ureter is short and usually runs a tortuous course, and its chance of being obstructed by aberrant vessels is greater than a normally situated kidney.

Obviously, the pelvic kidney is more susceptible to disease and trauma from childbirth than a kidney that lies in its normal position, and when these pelvic kidneys are solitary, their vulnerability to disease produces a serious problem.

Conclusions

(1) The solitary pelvic kidney is a rare anomaly which is associated with a high incidence of genital abnormalities in the female.

(2) It is highly susceptible to disease; 45.6 per cent of the 74 collected cases had urologic complications.

(3) The correct clinical diagnosis of solitary pelvic kidney was made in only 42 per cent of the 74 collected cases. This resulted in gross surgical and obstetric mismanagement.

(4) Early detection of this anomaly is important if proper management is to be employed. Of diagnostic aid in discovering the anomaly are:

(a) Urologic investigation of patients with abnormal results of urinalysis, particularly blood or pus and infection in the sediment of a properly collected urine specimen.

(b) Complete systemic examination including intravenous pyelography of a patient with any congenital anomaly.

(c) Suspicion of an associated anomaly of the upper urinary tract in any patient with a genital abnormality. A specific search for a solitary kidney should always be made in any patient with absence of the vagina.

(d) Consideration of a pelvic kidney in the differential diagnosis of those patients with an unexplained lower abdominal or pelvic mass with preliminary urologic studies prior to performance of exploratory surgical procedures.

(e) Urologic investigation prior to removal of any pelvic mass producing obstruction to labor.

(5) No pregnant woman known to have a solitary pelvic kidney should be allowed to go into labor; delivery should be by cesarean section.

(6) If there is a congenital anomaly of the female genitalia, no gynecologic operation should be performed prior to urologic investigation.

(7) Extreme conservatism in surgical treatment of solitary pelvic kidneys is imperative. The mortality rate in the 34 patients in the collected series who underwent operations was 29.6 per cent. There were 20 unnecessary exploratory laparotomies, and in 5 instances the only kidney was removed.

GROUP PSYCHOTHERAPY

EARL PARSONS, M.D.

Little Rock

The method of group psychotherapy has evolved into a distinct and effective form of treatment in its own right. It has been adopted by psychiatrists in private practice with gratifying results. The pioneers in the field of group psychotherapy have noted carefully the advantages and benefits which it has to offer the emotionally ill.

One very practical aspect of this type of treatment is the pertinent fact that it costs considerably less than individual sessions, thus making psychiatric aid accessible to a greater number of people who would benefit from it. Often a physician recognizes the need for psychotherapeutic treatment in one of his patients but fails to send him to a specialist because he feels that individual therapy would be financially impossible for the patient in question. Another unfortunate situation is brought about when a patient is referred to a psychiatrist and learns from the psychiatrist himself that the fee for private treatment is prohibitive. The patient at this point becomes hostile toward the psychiatrist, whose fee may sound unreasonable, toward the referring physician, and toward the medical profession in general. In such instances it is possible to offer group therapy as a compromise. This is an efficacious form of treatment which even a patient with limited paying ability will be able to afford. He can then make his own decision as to whether or not he wants psychiatric help. It is a means of avoiding the seemingly calloused attitude of having to reject a patient because he is not able to pay.

However, while group therapy may be looked upon as a financial godsend, this point is not emphasized to the patient as the reason for recommending it. The fact that it is less expensive than individual treatment is actually incidental. It is in itself a special and effective type of psychotherapy.

Group therapy as generally used was begun as a matter of necessity during World War II, with trained personnel limitations as the primary stimulus. Later the method was employed in hospitals where it was the only way in which the large number of patients could be seen. The benefits, the gains, and the improvements of the patients treated in this manner encouraged some psychiatrist to try it in private practice. The results have been similarly successful and beneficial.

It was some time after the positive results of group therapy had been established that it was recommended for financial reasons. It is pre-

sented as a way of enabling the therapist to see more patients and at the same time to offer for less money a type of treatment which is known to be efficient. In reality the patient can regulate his own price. He may decide how often he will attend group sessions and with how large a group he will affiliate himself.

The actual mechanics of the therapeutic sessions serve many purposes for the patients and are as varied as the mood and ability of the therapist and the needs and desires of the patients.

Mutual questions are broached (and some satisfactorily answered)—everything from simple medical questions to deep seated psychic conflicts. These answers are based on training and knowledge of the therapist, and probably more important the experiences of the various members of the group. This would represent simply the educative function of the group.

The confessional value of releasing hidden secrets, both thought and action, offers a release from, or at least a sharing of, and lessening of guilt feelings.

There are many other factors brought into place, but basically it amounts to a reactivation of family group conflicts acted out and solved at an adult level. At times the sessions are a bit rough when the group points out to an individual that his ache or pain is an infantile bid for his mother's attention carried over to his wife, but the patients seem to accept this with less resentment and antagonism than they would from his doctor, family or friends in his social setting.

This means of therapy offers no panacea, as it is long drawn out and subject to the same ups and downs as individual therapy. It does however, offer a very real and usually helpful means of treatment for persons that would ordinarily get no psychiatric help as such.

EDITORIAL

A PLAN FOR THE PRESERVATION OF OUR AMERICAN SYSTEM OF MEDICAL PRACTICE

At the direction of the Council, there are published herewith excerpts from the "President's Page" by Dr. L. H. Bauer, President, American Medical Association, originally appearing in *The Journal of the American Medical Association*. These are commended to the serious consideration of physicians.

His nine points, directed to all physicians and all component societies, are:

1. Work with rural communities to establish facilities for physicians, so that we shall have a better distribution of physicians.
2. See that good medical care for the indigent is available everywhere, just as it is in some states.
3. Extend public health coverage to areas lacking it.
4. Develop plans for the care of the chronic invalid.
5. Expand our voluntary insurance program not only to cover more persons but to cover those over age 65 and those suffering from illness of long duration.
6. Clean our own house, by disciplining those physicians who are tarnishing the reputation of the whole profession by their unethical acts of overcharging, accepting kick-backs, and making commercial arrangements with pharmacists.
7. See that the public is protected so that they can always obtain the services of physicians.
8. Revitalize our county societies and make them leaders in their communities in all health matters.
9. Inculcate the newly trained physicians in the tradition and ethics of medicine.

Dr. Bauer said that there also are "certain legislative matters that will require our attention and earnest study." He listed them as follows:

1. The establishment of a department or independent agency of health in the federal government. It must not be tied in with education or social security. Health is important enough to warrant an agency by itself.
2. The making of constructive suggestions for the solution of the problem of the totally disabled under the social security law.
3. Obtaining sufficient physicians for the armed forces, without injustices or upsetting civilian medical care programs.
4. Enactment of a law allowing pensions or retirement privileges for the self-employed, along the lines of the Reed-Keogh bill introduced in the last Congress.

"Another matter, which may or may not require legislation," Dr. Bauer said, "is a solution of the problems related to the Veterans Administration.

"These are a few of the matters that will engage our activities in the immediate future. They will require the labors and cooperation of all our constituent and component units, as well as the support of the individual members of the profession. A united profession can accomplish much, while a disunited profession can accomplish nothing."

THIS WORLD TODAY

By ROYCE BRIER

Yellow Cadillac Fantasy

You have an illness, go to a hospital, and after two or three weeks you are back in circulation. The doctor sends you a bill for \$200. If you have it, and the television is almost paid for, you remit. Or you may send him \$50 a month.

The hospital, however, was down with your bill weekly, and never mind the television. It tots up \$522.22, including some laboratory, X-ray, and those various extras which they can pile on a moderate surgery. If your illness is the punishing kind, your doctor may bill you for \$350 or \$500, and your hospital, therapeutic X-ray and blood services may run to \$1,022.22, or \$2,022.22, plus a few hundred for private nursing.

So a politician comes along, or a social thinker, and says: it's these doctors. They're grasping, they're callous, they're a cartel which has you by the throat, and besides, they all drive canary-yellow Cadillacs.

It's never the blood, which you wouldn't have got thirty years ago, or the armies of technicians with roomful of machines costing billions. It's never the millions in research on the new drugs and techniques you are paying back, and if you are insured, it's never the cost of insurance. Insurance companies run for nothing.

So it's the doctor. He's the boss, the guy who put you through the wringer. Well, you can check over your bills, and see. Or you can string with the politician and the social thinker. Imagine a guy with a canary-yellow Cadillac. They ought to be reserved for the likes of Gary Cooper and Marilyn Monroe, who give you something for your money.

* * *

This is a yarn which has been peddled around America for two decades, a decade of depression and a decade of war and soaring costs. It has been assiduously pushed by politicians for votes, and by social thinkers for power and space in which to do their thinking. The American Medical Association has either let it ride, or when it has tried to counter, has failed in understanding, and bungled it.

So doctors collectively, as a professional category, are currently "unpopular," though individually they seem about like the rest of us. Laymen

[Reprinted by courtesy of Mr. Brier and the San Francisco Chronicle in which this column appeared.]



INTRODUCING OUR X-RAY

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With seven years' experience in x-ray sales and service, Carroll is well qualified to take care of your every x-ray and physio-therapy need.

Having been with the Wm. T. Stover Co., Inc., for eight years, traveling throughout the state of Arkansas, he is well acquainted with all our friends of the medical profession.



CHARLES W. HOOD

With his degree in electrical engineering, along with eight years' experience on all types of x-ray and physio-therapy equipment, you may call on Charlie and know you will receive prompt and efficient service.

Charlie's main purpose in life is to make sure that every customer of Stovers' is expertly and courteously served.

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WM. J. WRIGHT

Bill is a graduate of the University of Arkansas, where he received his degree in electrical engineering. He has had four years' experience with Stovers' and is well qualified to answer any and all your technical problems.



JIM MOSLEY

Jim is well known among the medical profession throughout the state. He has been servicing your valued medical equipment for two years. You may rely on his five years' mechanical and electrical experience with confidence. So when it's service you need write, wire or call Jim and he will see that your requirements are fulfilled.



who haven't time to check their bills have strung along. There is a climate. In this climate it is "popular" to support the public prepossession, and sock the doctors. This socko may come from any direction and on any ground, so long as it's a socko.

Rear Admiral Lamont Pugh, surgeon-general of the United States Navy, says American doctors (and dentists) are avaricious. He put this socko in an address to an association of military surgeons. Why? Well, they're "prima donnas," and their main objection to military service is a financial one. With them, said Doctor Pugh, civilian practice is "simply a matter of easier, quicker and bigger money—avarice."

He says also he is tired of a "hue and cry" that military service should be made more attractive for physicians and dentists. He was recently in Korea, and he says nobody is trying to make military service more attractive for the soldiers there. For stark emotion this last is quite a set-piece, but its irrelevance is as striking.

* * *

As a matter of plain fact, there has been a "hue and cry" around this country for ten years for more "attractive" military service. True, you can't make suffering and danger attractive, and you can't make a combat line comfortable, but the third great curse of war, boredom, has been under steady attack. In pay, entertainment and services, the American military simply dumfounds all foreign observers.

So now it's reprehensible for doctors to press for more "attractive" military service, but it wasn't reprehensible for veterans' organizations and the soldiers themselves?

But let us go back to the avaricious prima donnas. Has the Admiral been around to the high schools and junior colleges lately? Does he think the boys are aching to get into the Army, or his own Navy, and maybe see the world around the 38th Parallel? Why no, these kids are avaricious enough, if you want to be careless with the word, to want to get out and gather a few clams, maybe to marry their sweeties, maybe to get a hot-rod, maybe anything, but brother, their tongues ain't hanging out for policing camps, swabbing decks and shooting it out with the Asiatics!

So a doctor works twelve years for a medical education, starves for a few, gets out of debt at 33, at 37 by dint of an 18-hour day and hard-earned skill, acquires a good practice with a junior executive's income, a wife and a couple of kids,

and a home half paid for, and he's a scrooge if he's reluctant to toss this for a couple of years, dump the mortgage and send the wife and kids back to grandma.

That's your average military age doctor (or dentist) in America today, and he drives a '49 Buick, maroon, a little rubbed. AMA issued a quickie reply to the Admiral, saying doctors were very patriotic during the war, quite beside the point. This isn't a matter of patriotism, but of common sense, which is something the American people are presumed to have when they are exhorted to examine their national problems.

REPORT OF THE BOARD OF TRUSTEES ON RE- ORGANIZATION PLAN NO. 1 OF 1953, ADOPTED UNANIMOUSLY BY THE HOUSE OF DELEGATES ON MARCH 14

The House of Delegates of the American Medical Association has for nearly 80 years been on record as favoring an independent Department of Health in the federal government. The reason for this stand has been that the House has felt that health and medicine should be given a status commensurate with their dignity and importance in the lives of the American people, and that they should be completely divorced from any political considerations.

The Board of Trustees, after a careful study of the policy of the American Medical Association with respect to the administration of health activities in the Executive Branch of the government and after studying the Reorganization Plan for elevation of the Federal Security Agency to cabinet status submitted by President Eisenhower to the Congress, finds that Reorganization Plan No. 1 of 1953 provides for a special assistant to the Secretary for Health and Medical Affairs. This provision is a step in the right direction which should result in centralized coordination under a leader in the medical field of the health activities of the proposed department. Health, therefore, is given a special position. The proposed plan, properly administered, will permit more effective coordination and administration of the health activities of the new Department without interference or control by other branches.

Previous attempts to raise the Federal Security Agency from an independent agency to the level of an Executive Department have been opposed by the Association because the plan did not meet these aims.

Inasmuch as federal health benefits and programs are established by the Congress, an admin-

istration bent on achieving the nationalization of medicine cannot reach that goal except with the support of Congress. Therefore, an organizational plan through which federal health activities are administered, although important, is not nearly so vital an issue as the policies adopted by the Congress of the United States.

The Board of Trustees recommends that the House of Delegates reaffirm its stand in favor of an independent Department of Health but that it support the Reorganization Plan No. 1 of 1953 as being a step in the right direction; that the American Medical Association cooperate in making the plan successful and that it watch its development with great care and interest.

It should be understood, however, that the Association reserves the right to make recommendations for amendment of the then existing law or to press for the establishment of an independent Department of Health, if the present plan does not, after a sufficient length of time for development, result in proper advancement in and protection of health and medical science and in their freedom from political control.

OBSOLETE DIATHERMY APPARATUS

Physicians are reminded that the Federal Communications Commission has ordered that diathermy apparatus used for therapeutic purposes which does not meet the revised standards of the Commission may not be employed after June 30, 1953. Surgical diathermy apparatus is excepted. It is likely that a number of units which do not conform to present regulations are in use and physicians would do well to inform themselves as to the situation as affects these units. A list of acceptable diathermy apparatus may be obtained from the Council on Physical Medicine and Rehabilitation, American Medical Association, 535 North Dearborn Street, Chicago 10, Illinois.

CORRESPONDENCE

April 13, 1953.

Dear Alumni:

We are about to close another school year at the Medical School and there is a new graduating class joining you as alumni, of one of the best small schools in the country. We may have our problems, as do other schools, but it would be hard to find a school that has done as well with the resources that we have available. We can point with pride to the records that we have made in the past and the possibilities that are about to be realized in the near future. We have yet to realize what a good thing we have. To make this more real, we are presenting a clinical assembly in connection with commencement this June 14-

15. We hope to have some of the graduates that have gone up in their field back with us to bring us up to date on the program of medicine in their respective specialties. This is to be an instructive, as well as an organizational meeting of the medical alumni. All interested physicians are invited and especially all alumni.

The program for this session is being published in your Journal and further information may be obtained by contacting the office of Post Graduate Medicine, University of Arkansas School of Medicine, Little Rock. The medical school needs help more than ever before and we are feeling the need for it as the practice of medicine becomes more progressive.

Let's support our school in order that it may support us.

Faternally,

Eugene H. Crawley, M. D.

Vice President, Arkansas Alumni Association.

ANNOUNCEMENT

April 13, 1953.

Alumni of the University of
Arkansas School of Medicine
Physicians of the State of Arkansas

Dear Doctor:

The Alumni Association of the University of Arkansas School of Medicine is inaugurating a Clinical Assembly to be held in conjunction with graduation in the spring of the year.

The Alumni Association is an important part in the University's activities. The alumni can be of great assistance to the University and it is believed that the University can be of considerable assistance to its alumni through Continuing Education. It is the hope of the administration of the University and of the officers of the Alumni Association that these aims can be more nearly fulfilled in the future. To this end the Alumni Association and the Office of Postgraduate Medicine are cooperating to bring to you a new type of Clinical Assembly. It is proposed that the morning session be conducted by the alumni, inviting graduates of former years to come back and present the results of their studies and observations, and that the afternoon session be conducted by the Faculty of the School of Medicine.

The school year ends in the gala event of graduation. With the establishment of the School of Medicine Graduation here in Little Rock, this seemed an appropriate time to plan such a meeting. The festivities surrounding baccalaureate and graduation form a fitting background for the reconvening of the alumni and friends of the school, and under such auspices to renew old friendships, make new ones, and to refresh one's professional

stores all within the confines of his Alma Mater. When the new Medical Center is opened in 1955, it is the hope of your Alumni Association that this Clinical Assembly and Alumni Reunion will be a well established feature of Graduation Week.

All alumni of the University of Arkansas School of Medicine and physicians practicing within the State of Arkansas are cordially invited to attend. We are looking forward to seeing you in Little Rock on June 14 and 15, 1953.

Faternally yours,

Eugene H. Crawley, M. D.

Vice President of the Alumni Assn.

Chairman of the Medical Division.

ALUMNI ASSOCIATION MEETING AND CLINICAL ASSEMBLY

June 14 and 15, 1953

Little Rock, Arkansas

Sunday, June 14, 1953

5:00 p.m.—Baccalaureate—Robinson Auditorium

7:00 p.m.—Alumni Association Reunion—Fish Fry—
Boyle Park

The Medical Center — Howard Eichen-
baum, Architect

Monday, June 15, 1953

**Clinical Assembly—School of Medicine—
12th and McAlmont**

9:45-10:00 a.m.—Opening Exercises

10:00-12:00 p.m.—Clinical Program—Alumni of School

12:00- 2:00 p.m.—Luncheon—School of Medicine Cafeteria

2:00- 4:00 p.m.—Symposium on Recent Trends on Diag-
nosis and Treatment — Medical School
Faculty

4:00 p.m.—Alumni Association Meeting

8:00 p.m.—Graduation Exercises — Robinson Audi-
torium

ALUMNI CLINICAL ASSEMBLY

June 14 and 15, 1953

Sunday, June 14, 1953

5:00 p.m.—Baccalaureate—Robinson Auditorium

7:00 p.m.—Alumni Association Reunion—Fish Fry—
Boyle Park

**Clinical Assembly—School of Medicine—
12th and McAlmont**

9:45-10:00 a.m.—Opening Exercises

10:00-10:30 a.m.—EENT

10:30-11:00 a.m.—Diagnostic Radiology

11:00-11:15 a.m.—Recess

11:15-11:45 a.m.—Functional Gastro-Intestinal Disturbance

11:45-12:15 p.m.—Obstetrics and Gynecology

12:30- 2:00 p.m.—Luncheon—School of Medicine Cafeteria

2:00- 4:00 p.m.—Symposium: Recent Trends in Diagnosis
and Treatment

2:00- 2:15 p.m.—Eye Infections

2:15- 2:30 p.m.—Pathology

2:30- 2:45 p.m.—Hazards of Cortisone and ACTH Therapy

2:45- 3:00 p.m.—Diagnostic Aids in Gynecology

3:00- 3:15 p.m.—Immediate Care of Burns

3:15- 3:45 p.m.—What to Do When You Find a Man Un-
conscious

3:30- 3:45 p.m.—Care of the Newborn

3:45- 4:00 p.m.—Recess

4:00 p.m.—Alumni Meeting

8:00 p.m.—Graduation Exercises

HOW THE ILO OPERATES

The correspondence below gives an indication of how treaties made by agreement under the International Labor Organization affect licensure of aliens in the United States and is presented for the thoughtful consideration of all physicians.

The Bricker resolution, now pending in the United States Senate, Senate Joint Resolution No. 1, proposes to amend the Constitution so that treaties will not supersede federal or state laws and would require a federal law to carry out any treaty or executive agreement. A similar resolution, H. J. R. No. 17 has been introduced in the House of Representative Norrell of Arkansas.

Hearings so far by the Senate have developed that it is apparently the "modest desire of the International Labor Organization to become the economic overseer of all humanity."

The resolution has the indorsement of 63 senators, the American Medical Association, the American Bar Association and numerous other groups.

AMBASCIATA D'ITALIA

Washington, D. C.

October 29, 1952

Medical Board of the
Arkansas Medical Society
Texarkana, Arkansas

Dear Sirs:

Paragraph 2 of Article I of the Treaty of Friendship, Commerce and Navigation signed at Rome on February 2nd, 1948, between the United States and Italy, establishes that, in conformity with the applicable laws and regulations, the "nationals of either High Contracting Party, be permitted to exercise commercial, manufacturing, processing, financial, scientific, educational, religious, philanthropic and professional activities, except the practice of law."

The Embassy contacted some time ago the Department of State in order to have the American interpretation of the above-mentioned article in respect to the exercise of the medical professions in the United States on the part of Italian citizens.

The Department answered as follows:

... "The Treaty provisions would require the States, each according to its own procedure, to admit Italian nationals to the practice of medicine on terms as favorable as those on which each admits its own citizens or other nationals of the United States. Such treaty rights would be enforceable by Italian nationals in the State and Federal courts of justice. **State laws or regulations for bidding aliens to practice medicine, or providing conditions more burdensome than for the State's own citizens, would be inoperative with**

respect to Italian nationals. The examining and licensing authorities remain, however, the State's own and nothing in the Treaty would require recognition of degrees of Italian educational institutions or the rulings of Italian examining or licensing authorities."

The Department added that it did not possess detailed information relating to the procedures adopted by the various States, and suggested that the Embassy address itself to the American Medical Association of Chicago.

The Association replied to the Embassy's request informing that the best course to take was to apply to the Medical Examining and Licensing Boards of the various States.

This Embassy will, therefore, be very grateful to you for kindly answering the following questions:

1) Aside from the question of the recognition of academic titles, are there in your State laws or regulations forbidding foreigners to practice medicine or dentistry?

2) If so, what steps have been taken to render inoperative such laws and regulations with respect to Italian nationals?

3) What procedure should an Italian citizen follow to obtain recognition in your State of the specific treaty rights which put him in the same position of a national of the United States in regard to the condition of citizenship, when applying for the exercise of medicine or dentistry?

This Embassy expresses in advance its best thanks for the courtesy of your reply.

Very truly yours,

Alberto Tarchiani,
Ambassador of Italy.

GAMMA GLOBULIN DISTRIBUTION

Memorandum

To: All Physicians of Arkansas. April 15, 1953.

From: **Special Committee of Arkansas State Medical Society** appointed to develop policy for allocation of gamma globulin for distribution in connection with measles and poliomyelitis.

Members of Committee:

Dr. John Smith, Little Rock, Arkansas, Chairman.

Dr. Vida Gordon, Little Rock, Arkansas, Secretary.

Dr. Alan Cazort, Little Rock, Arkansas.

Dr. A. A. Little, Texarkana, Arkansas.

Dr. Hugh Edwards, Searcy, Arkansas.

Dr. Alfred Hathcock, Fayetteville, Arkansas.

The Office of Defense Mobilization has agreed to coordinate the distribution of a central pool of immune serum globulin which is being provided by the American Red Cross, the Department of

Defense, through the Red Cross, and the National Foundation for Infantile Paralysis. The only available gamma globulin for physicians will be from this source.

Arkansas will receive only 13,000 cc sent through the State Health Department in 2 cc ampules to doctors for the prevention and modification of measles and this amount is calculated in cc as 1.5 times the median number of cases of measles reported in 1947 to 1951 rounded to the nearest 100 cc except that the allocation to any state shall not be less than the mean annual distribution of Red Cross immune serum globulin for the same five year period which in Arkansas was approximately 7,200 cc.

An additional allotment will be given early in 1953 based on cases reported monthly. Hence it is imperative if Arkansas is to get more cc that doctors report the cases better and that we use what we have available judiciously.

It has been estimated, for example, that in the epidemic year 1949 probably not more than one-fourth of the total cases occurring in the state were reported. It should also be emphasized that a major portion of the contacts will not need the full two cc ampule.

The following is an outline specifying how the committee feels that the gamma globulin should be used by the doctors in the state inasmuch as the supply is limited and they have made this recommendation to the State Health Department:

1. Immune serum globulin may rationally be employed in the treatment of measles only in the catarrhal stage and as follows:
 - a. In infants born to mothers who have not had measles.
 - b. In children simultaneously ill with other diseases, particularly tuberculosis.
2. **Gamma globulin should be used only on exposed susceptible household contacts.**
 - A. **If an attempt is to be made to prevent measles by passive immunization, selection of cases should be made as follows:**
 1. Infants under 6 months of age whose mothers have not had measles.
 2. All infants under one year of age.
 3. Children ill with other diseases, tuberculosis and rheumatic fever in particular.
 4. When the disease appears in an institution and it is necessary to prevent an epidemic.

DOSAGE: The recommended dosage in the above instances would be 0.25 cc per Kilo intramuscularly prior to the **sixth day** after exposure. Thereafter, larger dosage can be used but

modification not prevention would probably result.

B. Immune serum globulin may be used for partial protection and to modify the measles in exposed susceptible household contacts:

1. All of the children under five (except infants under six months of age whose mothers have had measles).

DOSAGE: The dosage recommended for modification is as follows: 0.05 cc per Kilo intramuscularly if given **by the sixth day** after exposure.*

Gamma globulin is to be allotted to physicians through the state or county health departments only upon a signed request giving the total amount desired and the names, ages, weights and address of all contacts who are to receive the gamma globulin as well as the name, age, parents and address of the case to whom the contacts were exposed.

Re: POLIOMYELITIS

The State Health Office in Arkansas informed this committee that between six and seven million cc of gamma globulin will be available for protection against poliomyelitis during 1953 for the entire country.

BASIC ALLOCATION: The basic allocation of gamma globulin to the entire State of Arkansas for the entire season will be calculated on the basis of 40 cc times the average number of cases reported annually for the five-year period 1947-1951. The State Health Officer reported to the committee that the average number of cases for Arkansas during this period was 403.

This means that 16,000 cc of serum immune globulin will be available in the State of Arkansas for 1,600 children inasmuch as the material is to be dispensed for poliomyelitis in 10 cc vials.

ADDITIONAL ALLOCATION: After May 1st states will receive at appropriate intervals additional allocation of 40 cc for each reported case in excess of the mean cumulative annual incidence for the same seasonal period. Doctors will be expected to report cases as to paralytic or non-paralytic inasmuch as it may be necessary to make adjustments in these additional allocations to individual states, depending upon the proportion of paralytic cases reported.

SUPPLEMENTAL ALLOCATION: About July 1st and at bi-weekly intervals thereafter until Oc-

tober 1st, supplementary allocations will be made to states and these will be in proportion to the typical seasonal incidence of poliomyelitis in the United States for the period following the allocation at the level designed to exhaust the supply available for this purpose by October 1st. This will be proportional to the morbidity being reported in each state.

This committee has recommended that this material be allocated for use by doctors only on exposed susceptible household contacts of poliomyelitis 30 years of age or under and pregnant women of any age.

The committee feels that since further evidence is needed as to the effectiveness of gamma globulin in preventing or modifying poliomyelitis **it is urgent that records be kept on the results of its use in the state for protection of exposed susceptible household contacts of clinically diagnosed cases of poliomyelitis.**

Gamma globulin is to be allocated to the physicians through the state or County Health Department only upon a signed request for the amount desired, giving the names, ages, weights and address of the exposed susceptible household contacts who are to receive it, as well as the name, age, parent's name, date of onset and address of the case to whom the contacts were exposed.

A special report card will be sent with each 10 cc ampule to the county health department if such is dispensing the gamma globulin or directly to the physicians from the State Health Department if a County Health Nurse is not available in the county.

The information on this card is to be completed by a representative of the public health department, county or state, as to the effectiveness of the use of gamma globulin in preventing or modifying poliomyelitis in the contacts on whom it was used.

Extensive lay education and publicity is to be given by the State Health Department to emphasize the short supply of gamma globulin and that the need for allocation has been produced by the fact that insufficient blood is being donated in the blood donor programs which makes this material available.

The committee also feels that it should be stressed very strongly to the lay public that it takes one pint of blood to make two cc of the gamma globulin which is used in either measles or poliomyelitis contacts and that the public should be urged to promote and improve the blood donor program now.

* Reference: Report of the Committee on Immunization and Therapeutic Procedures for Acute Infectious Diseases, American Academy of Pediatrics, 1952.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

SOME URGENT PROBLEMS IN TUBERCULOSIS

By Edgar Mayer, M.D., Health News, December, 1952.

Now that the excitement has abated over the "miracle drugs," the Isonicotinic acid hydrazides (which one had vainly hoped would settle our problems in tuberculosis once and for all), we must again settle down to treating the disease by all available means. There is a widespread tendency to belittle the task ahead since there is little appreciation of the true size and complexity of the problems facing us. It is often said that with the addition of the new drugs effective against the tubercle bacillus, our task has been greatly simplified. The fact is that with every step of advance new problems arise which must be solved before the new advance can be utilized properly. This is true also for the Isonicotinic acid hydrazides. We know now that these drugs are useful agents effective against tubercle bacilli, but by now we also know that they fall far short of the cure of the disease. To make proper use of them we must first solve the problem of how they can best be fitted into our present scheme of treatment. This is a problem of no small proportion and it is one of great urgency. We clinicians must find as soon as possible, answers to several questions:

- (1) Should the drugs be reserved for patients who have become resistant to Streptomycin (S.M.) and Para-amino-salicylic acid (P.A.S.)?
- (2) Should the drugs be used at the start in combination with S.M.; or with S.M. and P.A.S.?
- (3) What are the optimal dosages and optimal durations of treatment for the combinations of the drugs?
- (4) Can these combinations be used intermittently—at long intervals and in minimal dosage—for many years to render and keep tubercle bacilli in the body permanently nonviable?

Attempts to answer these questions have of course been started. From experimental studies some guide-posts have emerged. The new drugs best designated as "synthetics" (in contrast with Streptomycin which is an antibiotic) are definitely not as effective against tubercle bacilli as is S.M. Resistance to synthetics emerges sooner than to antibiotics. However, the synthetics have small molecular structure enabling them to penetrate into the depth of necrotic lesions and can reach the bacilli places where S.M. cannot. The synthetics are apparently mostly devoid of such toxic ef-

fects as S.M. and P.A.S. possess when given in large quantities.

Obviously the answers to these questions will profoundly affect not only immediate treatment but our entire scheme of tuberculosis control.

It will probably take years before the answers to these questions will be forthcoming. Until then the drugs are unfortunately being used widely in haphazard fashion. Current experience will therefore teach us chiefly how not to use them. As in the first period with the use of S.M., there will emerge a resultant large number of cases with resistant organisms. This leads us to our next major current problem, "**the arrested case**" of pulmonary tuberculosis.

The Arrested Case

When are residual lesions, that remain after chemotherapy, arrested? We no longer have the criterion of positive sputum to guide us. We are confused as to the question of the further treatment of these patients. Some strongly believe in the final surgical excision of all such lesions and are convinced that such is the only answer. Others believe that most of these lesions can be permanently healed medically and that excision is not needed. As in the past, so now, they are convinced that such lesions can be left for the body to hold under control by its own biological forces, and that the risk of major operation for the removal of such residues is not justified.

How many of these lesions will flare up again? Obviously only long range observation will answer that question. Even if we decided that all such lesions should be removed, it would not be practical to do so. First, the number of these cases is by now so large that we practically lack the facilities to operate on all of them. Second, it is quite unlikely that more than a minority could be persuaded to submit to the operation. Most of these patients must be turned back sooner or later to their families and their jobs. Time alone will tell how many of them will relapse and how soon. **This in turn brings up several questions:**

- (1) How much of a source of new infection do these cases represent?
- (2) Are we physicians continuously returning to the population sources of infection which keep tuberculosis morbidity persistently high?

High Morbidity Rate Poses Problem

The urgency of the answers is difficult to over-emphasize. The most alarming feature of the present phase in tuberculosis is the persistently high morbidity. As our statisticians have recently repeatedly pointed out, the decline in the mortality from tuberculosis continues sharp. In contrast, the number of people with tuberculosis has tended to remain very high. The problems posed by persistently high morbidity are manifold and complex and serious. Mary Dempsey (Statistician of the National Tuberculosis Association) most recently stressed the continued magnitude of the public health problem. She sounded a warning against the tendency to belittle its seriousness. It seems that too much discussion in the lay press regarding current progress in tuberculosis has tended to mislead not only the lay public, but even large sections of the profession, into believing that tuberculosis is no longer a major public health problem. We clinicians engaged in the management of the patients are now even more than ever troubled by the dangerous potentialities inherent in the so-called "arrested cases of tuberculosis" that are returned to their families and jobs. We are now especially faced with the problem as to how much control we should exercise over their lives.

All of these are urgent and serious problems. The answers to these questions must be worked out very carefully and will require considerable time.

OBITUARY

FINLEY A. ROBINSON, Blytheville, 72 years, died March 26th of a heart attack. Born in Henning, Tennessee, he graduated from Memphis Hospital Medical College in 1904 and began practice at Blytheville in 1912, opening one of Mississippi county's first drug stores. He was instrumental in organization of the Mississippi County Farm Bureau, the Saint Francis Levee Board and of the Mississippi County Medical Society. He was a member of the First Methodist Church. Surviving are a son and two daughters.

IRA F. JONES, age 54 years, Fort Smith, died March 30th after a prolonged illness. Born in Mississippi, he graduated from the University of Mississippi and received his medical degree from the University of Pennsylvania in 1922. Following internships and residences at the Pennsylvania State Sanatorium, Saint Joseph's Hospital and Bellevue Hospitals, he located first at Hutchinson, Kansas, and moved to Fort Smith in 1925. He had served as president of the Sebastian County Medical Society, the clinical staff societies of Saint Edwards Mercy and Sparks Memorial Hospitals,

of the Tenth Councilor District Medical Society and of the Exchange Club. He had served the Arkansas Medical Society as vice president. He was a member of the Central Association of Obstetricians and Gynecologists, of the Southwestern Surgical Congress and was a Fellow of the American College of Surgeons. He was a member of the Masonic bodies and of the Scottish Rite and of the First Methodist Church. Surviving are his wife, two sons and a daughter.

HERWALD CUTTING, age 70, Little Rock, died March 11th. A graduate of the University of Arkansas School of Medicine in 1912, he had continuously practiced in Little Rock. Surviving relatives are his wife and a sister.

WALTER E. ELLINGTON, age 69, Paragould, died March 10th following a heart attack. Born in Greene county, he graduated from Memphis Hospital Medical College in 1913 and located at Paragould about 25 years ago after first practicing at Bard and Brighton. He was a past-president of the Greene County Medical Society and had served as county health officer for over ten years. He was a member of the Masonic Lodge and of the First Methodist Church. He is survived by his wife.

PROCEEDINGS OF SOCIETIES

The Sebastian County Medical Society was addressed April 14th by R. A. Downs, "The Role of Gout in the Formation of Renal Calculi."

E. Z. Hornberger, Secretary.

D. W. Goldstein and A. S. Koenig, Fort Smith, participated in a symposium on melanoma at Camp Chaffee Station Hospital April 14th.

The Arkansas Society of Medical Technologists was addressed at its recent meeting in Hot Springs National Park by William Orr, Little Rock, "Liver Function Tests;" Benjamin B. Wells, Little Rock, "Kidney Function Tests;" and A. S. Koenig, Fort Smith, "Proposed Changes in the Educational Requirements for Certification by the Registry of Medical Technologists." Anderson Nettleship, Little Rock, was toastmaster for the banquet session.

Officers elected by the Arkansas Academy of General Practice in Little Rock, April 19th, are: President, James M. Kolb, Clarksville; President-elect, C. R. Ellis, Malvern; Vice President, B. N. Saltzman, Mountain Home, and Secretary-treasurer, C. C. Long, Ozark.

The Postgraduate Course in Cardiology to be held at the University of Arkansas School of Medicine May 13th and 14th will be addressed by J. E. Doherty, "Ballisto-cardiography in Heart Disease;" O. W. Beard, "Rheumatic Heart Disease;" Robert P. Grant, National Heart Institute, "The Clinical Usefulness of Vector Technique in Electrocardiography;" S. Weldon Abbott, "Hexamethonium Preparations in the Treatment of Hypertensive Cardiovascular Disease;" Robert P. Grant, "Architectural Change in the Heart in Heart Disease;" I. Meschan, "Role of the Radiologist in Heart Disease;" O. W. Beard, "Indications and Contraindications for Cardiac Surgery in Adults;" Masauki Hara, "Surgery in Cardiac Disease in Adults," and J. E. Doherty, "Use of Oral Diuretic Agents in Cardiac Failure."

The activity of the Drew County Medical Society in its preparation of a health column in a local newspaper since 1946 is commented on most favorably by THE PR DOCTOR in a recent issue.

The Southeast Arkansas Medical Society met at Monticello March 16th with the Auxiliary presenting the program on "Doctor's Day." Kenneth Jones, Little Rock, spoke on "Treatment of intervertebral Disk Lesions."

The Craighead-Poinsett County Medical Society was addressed April 1st by Robert A. Knight, Memphis, on fractures of the upper and lower extremities in children.

J. H. McCurry, Secretary.

PERSONALS AND NEWS ITEMS

W. G. Cooper has been elected president of the Little Rock School Board.

G. D. Murphy, Jr., El Dorado, recently addressed the Malvern post, American Legion.

Geo. S. Napper, McCrory, has been recalled to active military service.

C. P. Arnold has located at Camden for the practice of pediatrics and pediatric surgery.

Preston Brogdon is moving from Springdale to Mitchell, South Dakota.

J. E. McGuire has moved to new offices at Piggott.

Chas. G. Leverett has been elected a member of the McGehee School Board.

W. J. Ketz, Batesville, has been installed as Grand Sword Bearer for the State of Arkansas at a recent meeting of the Knights Templar in Batesville.

The following were announced as contributors to the American Medical Education Foundation during February: R. L. Calaway, Batesville; W. H. Calaway, Batesville; J. A. Martin, Trumann; J. J. Monfort, Batesville; Chas. A. Taylor, Batesville; Chaney W. Taylor, Batesville, and F. Q. Wyatt, Batesville.

T. G. Price, Wynne, recently took special work at the University of Tennessee College of Medicine.

Oscar Gray, Jr., formerly of Jacksonville, has been promoted to lieutenant, senior grade, naval medical corps.

Robert Hyatt, Monticello, has been elected as associate fellow of the International College of Surgeons.

E. L. Dunaway, Conway, has been appointed a member of the Arkansas State Racing Commission.

The following were in attendance at the Oklahoma City meeting of the American College of Surgeons: J. J. Monfort, Batesville; Roy I. Millard, Russellville; H. E. Mobley, Morrilton; H. M. Armstrong, H. S. Irons, Jr., Monroe D. McClain and Jos. F. Shuffield, Little Rock; and W. M. Gross and G. E. Simpson, Fort Smith.

S. M. Wilson, Rogers, took special work at the Mayo Clinic during March.

Dr. and Mrs. H. E. Murry, Texarkana, visited in Europe during March and April.

Floyd Dozier, Marianna, was elected vice president for Arkansas of the Mid-South Postgraduate Assembly February 11th.

Max J. Mobley, Russellville, has been elected Commanding Officer, Civil Air Patrol, Russellville Squadron.

L. Gardner has been elected a director of the Peoples Exchange Bank, Russellville.

L. Gardner, Ellis Gardner and Max J. Mobley, Russellville, recently addressed the staff meeting of Saint Anthony's Hospital, Morrilton.

Dr. and Mrs. W. F. Rose, Fort Smith, recently visited in California.

C. P. McCarty, Helena, recently took special work at the University of Tennessee College of Medicine.

Don Purcell, Paragould, recently addressed the Rotary Club on cancer.

Stewart M. Wilson, Rogers, recently took special work in electrocardiography at the University of Kansas.

Guy Hodges, Rogers, spent a recent vacation in Texas.

A diagnostic cancer clinic under the sponsorship of the Polk County Medical Society and the Arkansas Division, American Cancer Society, was conducted at Mena March 26th by D. W. Goldstein, M. B. Hoge, and H. C. Darnall, Fort Smith.

A diagnostic cancer clinic under the sponsorship of the Washington County Medical Society and the Arkansas Division, American Cancer Society, was conducted at Springdale April 2nd by Drs. W. Goldstein, H. C. Darnall, S. W. Hawkins and E. Z. Hornberger, Fort Smith.

"Adrenal Insufficiency in Newborn Male Infants" by B. P. Briggs, E. H. Crawley and V. L. Toombs, Little Rock, appeared in the Southern Medical Journal for April, 1953.

Hayden C. Nicholson, Dean, University of Arkansas School of Medicine, attended a meeting of the National Research Council in Washington during March.

W. E. Knight, Fort Smith, has been recalled to active military duty and assigned to Camp Chaffee, Arkansas.

On March 27th, the American Cancer Society announced the third renewal of a grant to Anderson Nettleship, Little Rock, in the amount of \$10,000 for research in the study of environmental factors in the production of cancer of the skin.

W. M. Gross, Fort Smith, attended the Oklahoma Orthopedic Society meeting at Tulsa April 12th.

T. P. Foltz, Fort Smith, attended the 1953 Annual Conference of Blue Cross Plans at Hollywood, Florida.

Lawrence Zell, Little Rock, and D. W. Goldstein, Fort Smith, attended the Oklahoma Dermatological Society meeting at Tulsa April 12th.

Benjamin B. Wells, Little Rock, recently addressed the American Society of Clinical Pathology meeting in Kansas City on "Laboratory Diagnosis of Renal Diseases and the Kidney."

The following were registered at the St. Louis session of the American Academy of General Practice: H. E. Murry, Texarkana; C. Randolph Ellis, Malvern; Anthony De Palma, Fayetteville; R. G. Kramer, Fort Smith; L. H. McDaniel, Tyronza; Fount Richardson, Fayetteville; Joe Beasley, Blytheville; W. J. Butt, Fayetteville; Bernard Capes, West Helena; O. H. Clopton, Rector; R. C. Dickinson, Horatio; Charles W. Dixon, Gould; S. A. Drennan, Stuttgart; Ross Fowler, Harrison; W. A. Fowler, Fayetteville; J. G. Gladden, Harrison; J. B. Hesterly, Prescott; G. L. Kimball, De Queen; H. V. Kirby, Harrison; J. M. Kolb, Clarksville; M. W. Maglio, Lepanto; Weldon Rainwater, Blytheville; R. B. Robins, Camden; B. N. Saltzman, Mountain Home; John M. Samuel, Little Rock; Charles Taylor, Blytheville, and Robert H. Whitehead, DeWitt.

MARRIED—On March 31st, Margie Williams, Memphis, and Houston Franks, Hughes.

Chas. R. Henry, Little Rock, addressed the Tennessee Academy of General Practice recently on opportunities in rural practice.

BORN—On April 15th, a daughter, to Dr. and Mrs. John Wassell, Little Rock.

W. E. Morris, Little Rock, has been appointed associate dean of the University of Arkansas School of Medicine.

J. K. Jones has returned to practice at Lepanto after a recent illness.

The fiftieth anniversary of practice by J. L. Rushing, Chidester, was observed by the citizens of that city on April 12th.

A. F. Barr recently addressed the Forrest City Rotary Club.

George Mallory, England, has returned to active duty with the air force medical corps.

Curtis Johnson has located at Tuckerman for practice.

WOMAN'S AUXILIARY NEWS

Mrs. Homer Wright was elected president of the Woman's Auxiliary to the Garland County Medical Society at the annual Doctor's Day dinner given by the auxiliary March 30th at the Arlington.

Other new officers elected at the dinner were: Mrs. Paul Woods, president-elect; Mrs. Cecil Parkerson, first vice president; Mrs. Loren Bohnen, second vice president; Mrs. W. R. Lee, third vice president; Mrs. Gordon Kelly, recording secretary; Mrs. O. A. Smith, corresponding secretary; Mrs. O. H. King, treasurer; Mrs. Turnor Wootten, historian; and Mrs. George Fletcher, poet laureate.

March 30 was the date designated as Doctors' Day by the Arkansas Legislature in a bill passed in 1951, making Arkansas the first state to pass such a resolution.

The date chosen for the day honoring doctors is significant as it is the anniversary of that day in 1842 when Dr. Crawford Long of Jefferson, Ga., performed the first surgical operation under anaesthesia. Before the advent of anaesthesia the amount of surgery practiced throughout the world was unbelievably small. In the 110 years since then there has been an inestimable amount of progress made. Doctors' Day pays tribute to this progress and to the untiring efforts of doctors to continue medical advancement.

Mrs. Frank Adams and Mrs. L. E. Reed were hostesses for the dinner. A social hour preceded the dinner.

Those attending were: Dr. and Mrs. Frank Adams, Dr. and Mrs. Robert Atkinson, Dr. and Mrs. Frank Burton, Dr. and Mrs. John Dodson, Dr. and Mrs. J. T. Durham, Dr. and Mrs. George Fletcher, Dr. and Mrs. George Fotioo, Dr. and Mrs. W. A. Goodrum, Dr. Charles Harris, Dr. and Mrs. O. H. King, Dr. and Mrs. Richard McFarland, Dr. and Mrs. C. W. Parkerson, Mrs. John Proctor, Dr. and Mrs. L. E. Reed, Dr. and Mrs. King Wade, Sr., Dr. and Mrs. King Wade, Jr., Dr. and Mrs. Paul Woods, Mrs. Turnor Wootten; those attending from the Army and Navy Hospital were Col. and Mrs. Charles Young and their guest, Col. Horace Villars, former commanding officer at the Army and Navy, and Col. and Mrs. Harvey Live-
say.

The Sebastian County Medical Auxiliary held a luncheon meeting March 2 with 18 members and three guests present.

The following officers were elected for the 1953-1954 year: President, Mrs. A. S. Koenig; Vice President, Mrs. John D. Olson; Secretary, Mrs. Ben Pride; Treasurer, Mrs. Ralph Downs.

Dr. William W. Klusmeier, orthodontist, was

the program speaker, and showed the film "Drop in the Bucket," concerning fluoridated water for Fort Smith and spoke on the subject.

Mrs. Louis O. Lambiotte,
Publicity Chairman.

The Sebastian County Medical Auxiliary held a luncheon meeting Monday, April 6 with 18 members and seven guests present.

Mrs. John D. Olson, President, named delegates to the state convention, April 20-22 as follows: Mrs. Gordon Simpson, Mrs. Robert Thompson, Mrs. Wright Hawkins; Alternates, Mrs. E. C. Moulton, Jr., and Mrs. A. S. Koenig.

Plans for the annual spring picnic for our husbands were discussed and a tour of St. Edwards Hospital addition concluded the meeting.

Mrs. Louis O. Lambiotte,
Publicity Chairman.

Mrs. A. S. Koenig was elected president of the auxiliary to Sebastian County Medical Society, to succeed Mrs. John D. Olson, March 2nd at the March luncheon meeting.

Mrs. Olson will become vice president. The other officers named were Mrs. Ben Pride, secretary, and Mrs. Ralph Downs, treasurer. They will be installed in April.

At the business session the auxiliary went on record as favoring 100 per cent the fluoridation of the city water supply, Mrs. Louis Lambiotte, who with Mrs. W. E. Knight, was hostess for the meeting, said.

Fifteen members and three visitors were present.

Dr. William W. Klusmeier, orthodontist, was the program speaker. He spoke in the interests of fluoridated water, stressing that there is two-thirds less tooth decay in teeth of children using fluoridated water than those drinking non-fluoridated water.

The young dentist announced that a recent report from Marshall, Texas, showed that after six years of drinking fluoridated water there was a 57 per cent reduction of tooth decay. Recently the city of Washington, D. C., voted to add fluoride to the water supply he added.

Announcement also was made that the fluoridation of water is endorsed by the National Congress of Parents and Teachers.

The Second Councilor District Medical Society met in joint dinner session with the Auxiliary at Batesville March 9th. Following dinner, the Auxiliary conducted a business meeting discussing the problem of nurse recruitment. Officers elected are: President, Mrs. Chas. A. Taylor; Vice Presi-

dent, Mrs. Paul Gray; Secretary, Mrs. F. Q. Wyatt, and Treasurer, Mrs. Victoria Saylor. These officers will be installed at the next regular meeting in May by Mrs. C. A. Churchill, Councilwoman for District Two. A social hour of canasta followed the business meeting.

The ladies of the Arkansas County Medical Auxiliary entertained the doctors of the county with a dinner at the Riceland Hotel, Stuttgart, on Tuesday, March 31st, at 7:30 p. m. The occasion was in celebration of Doctor's Day which is celebrated throughout the country.

Among those present at the dinner were Dr. and Mrs. R. H. Whitehead, Sr., Dr. and Mrs. R. H. Whitehead, Jr., Dr. and Mrs. Allan Talbot and Dr. and Mrs. C. W. Rasco, all of DeWitt, Dr. and Mrs. Young of Gillette, Dr. and Mrs. S. A. Drennen, Dr. and Mrs. T. S. Van Duyn, Dr. and Mrs. Milton John and Dr. and Mrs. Fred Stone, of Stuttgart.

The traditional doctor's flower, the red carnation, was used in decorating the table. A large medical bag was made of red carnations. The bag was left open, and was filled with bottles of medicine, boxes of cotton and a stethoscope.

Arrangements for the party were in charge of Mrs. Fred Stone, Chairman, and Mrs. Milton John, Vice Chairman.

After the dinner a film entitled "Adventures in Arkansas" was shown.

BOOK REVIEW

Cardiac Therapy. By Harold J. Stewart, M.D., Associate Professor of Medicine, Cornell University; Head of Division of Cardiology, Dept. Medicine, N. Y. Hospital-Cornell Medical Center. Publisher: Paul B. Hoeber, Inc., 1952. Medical Book Dept., Harper & Bros. Price \$10.00.

In this era of such rapid development of new drugs, surgical techniques and research tools such as cardiac catheterization, radioisotopes and electronic devices it is difficult to publish a truly up-to-date review of what could be considered optimum methods of treatment of the individual cardiac diseases. Dr. Stewart has, however, succeeded in bringing these newer forms of treatment and drugs into focus while emphasizing the value of more established procedures and methods of treatment. In all this is a well written, easily read and comprehensive presentation of the author's methods, and contains concise comments regarding the theories and practices of others.

Dr. Stewart has intentionally devoted as little time to etiology, pathology and natural history of the various diseases as is essential for the understanding of his therapeutic techniques. Although the author seems to apologize somewhat for repetition of certain principles through the separate chapters, his methods are presented with a clarity which is more than commendable. This type of organization has made the book an excellent reference as well as one which holds the interest of the cover-to-cover reader.

The review of each of the cardiac arrhythmias and the numerous methods of management of each is dealt with exhaustively, and simple enumeration is avoided. Dr. Stewart leans on his wealth of experience to present to the

reader his choice of methods, and discusses a selection of numerous alternative treatments which have been successful in reported cases. This serves as an excellent review of therapy and an ideal reference section for physicians and students. Here, too, many of the newer surgical methods of therapy are discussed along with a factual statistical indication of their success.

Of great value to all practitioners are the sections devoted to heart disease in the aged, during pregnancy and the cardiac management of surgical patients. Dr. Stewart sensibly emphasizes throughout the book that management of the cardiac patient is not a mechanical procedure, but consists of education, reassurance and visible interest in the patient as a personality.

A Manual of Clinical Allergy: By John M. Sheldon, M.D., Professor of Internal Medicine, University of Michigan Medical School; Robert G. Lovell, M.D., Instructor in Internal Medicine, University of Michigan Medical School; Kenneth P. Mathews, M. D., Assistant Professor of Internal Medicine, University of Michigan Medical School. 413 pages with 27 figures. Philadelphia and London: W. B. Saunders Company, 1953. Price \$8.50.

Since there is no field of medicine or surgery in which patients do not at times present themselves with allergic complaints, the book will perhaps be of interest to any physician or student of medicine.

This manual covers certain aspects of allergy practice which often are not very thoroughly covered in standard texts. For example, the sections on pollen and mould identification, allergy to plastics, Endocrine factors in allergic diseases, vascular allergy, drug allergy, and collagen diseases, recently have been recognized as being more important than was appreciated in the past.

The 413 pages are filled with practical features of doing a sound, safe, and medically acceptable allergy practice.

Electrocardiography in Practice: By Ashton Graybiel, M.D., Captain, Medical Corps, U. S. Navy; Director of Research, U. S. Naval School of Aviation Medicine, Pensacola, Florida; Paul D. White M.D., Executive Director, National Advisory Heart Council; Consultant in Medicine, Massachusetts General Hospital; Louise Wheeler, A.M., Executive Secretary, the Cardiac Laboratory, Massachusetts General Hospital; Conger Williams, M.D., Instructor in Medicine, Harvard Medical School; Associate Physician, Massachusetts General Hospital. New, 3rd Edition. 378 pages with 294 figures. Philadelphia and London: W. B. Saunders Company, 1952. Price \$10.00.

This is an excellent atlas of electrocardiography, filled with 294 illustrations of normal, abnormal, and unknown tracings for practice use by the reader. The authors state in the preface that this is not intended to be a textbook, but rather an atlas for reference. A rather detailed history of the development of our present concepts of electrocardiography is given, followed by sections on methods to be used, and sections on the normal and abnormal electrocardiograms, well illustrated with frequent tracings. The final section of the book consists of more than 50 pages of tracings for practice interpretation by the reader.

Physical Diagnosis. By Harry Ealker, M.D., F.A.C.P., Professor of Clinical Medicine, Medical College of Virginia. Pp. 461. 126 illustrations. Saint Louis: The C. V. Mosby Company, 1952. Price \$8.00.

This text comprehensively presents physical diagnosis but emphasizes, perhaps too much, the diagnosis of diseases of the heart and lungs.

MEMBERSHIP ROSTER OF THE ARKANSAS MEDICAL SOCIETY – 1952-1953

ARKANSAS COUNTY

Champion, Lucille K. Stuttgart
Champion, W. T. Stuttgart
Drennen, S. A., President. Stuttgart
Gresham, E. C. Crossett
John, Milton C., Jr. Stuttgart
McCracken, E. A. Stuttgart
Rasco, C. W., Jr. DeWitt
Riley, H. C. Bayou Meto
Talbot, A. G. DeWitt
Van Duyn, T. S. Stuttgart
Whitehead, R. H. Sr. DeWitt
Whitehead, R. H., Jr. DeWitt
Wilson, J. G. Keo

ASHLEY COUNTY

Barnes, L. C. Hamburg
*Cockerham, H. E. Portland
Cothren, W. R. Crossett
Crandall, M. C. Wilmot
Gresham, E. C. Crossett
Harville, W. E. Ashley
Hawkins, M. C. Parkdale
*Hoyt, Jonathan Crossett
Martin, Ann L. Crossett
Mask, D. L. Hamburg
Mathis, James L. Crossett
McCants, John M. Needham, Mass.
Millemann, Raymond J. Murphy, Oregon
Parker, J. L. Snyder
Regnier, W. A. Hamburg
Salb, R. L. Crossett
White, E. O. Hamburg
Wood, J. T. Fountain Hill

BAXTER COUNTY

Bentzien, E. W. Mountain Home
Chambers, S. W. Mountain Home
Dunbar, James C. Mountain Home
Gray, E. M. Mountain Home
Owen, Wm. M. Mountain Home
Pearce, C. G. Mountain Home
Pruitt, W. H. Clinton
Saltzman, B. N. Mountain Home
Van Beber, J. A. Gassville

BENTON COUNTY

Atkinson, R. M. Bentonville
Blauw, Chas. G. Siloam Springs
Collette, E. L., Jr. Rogers
Compton, Neil Bentonville
Dean, Lee A. Rogers
Gulledge, J. F. Siloam Springs
Gunter, C. D. Siloam Springs
Hall, Billy V. Gravette
Hodges, Guy Rogers
Huskins, J. D. Siloam Springs
Jackson, J. L. Bentonville
Jennings, W. E. Rogers
Moore, W. A. Rogers
Peacock, A. L. Gentry
Pickens, J. L. Rogers
Rollow, John A. Bentonville
Siler, K. A. Siloam Springs
White, Harry M. Rogers
Williams, Rex Siloam Springs
Wilson, C. S. Siloam Springs
Wilson, Stewart M. Rogers

BOONE COUNTY

Adams, A. V. Yellville
Breit, Wm. H. Harrison
Fowler, Ross. Harrison
Frailey, D. M. G. Harrison
Gladden, J. C. Harrison
Gladden, J. G. Harrison
Jackson, Ulys. Harrison
Kirby, H. V. Harrison
McCoy, O. B. Harrison
Owens, D. L. Harrison

BRADLEY COUNTY

Crow, Marvin T. Warren
Crow, Merl T., Jr. Warren
Dew, Hogan A. Warren
Estes, James Warren
Hunt, W. J. Warren
Marsh, J. W. Warren
Reasons, W. B. Hermitage
Roark, W. N. Hermitage

CARROLL COUNTY

Bohannon, J. H. Berryville
Carter, A. L. Berryville
Donaldson, C. W. Green Forrest
John, J. F. Eureka Springs
McCurry, D. K. Green Forrest
Poynor, Chas. Berryville
Smith, Fred C. Eureka Springs
Van Pelt, Ross. Eureka Springs

CHICOT COUNTY

Baker, E. Dermott
Barlow, B. E. Dermott
Binns, B. Z. Eudora
Burge, J. H. Lake Village

Douglas, S. W. Eudora
Easterling, W. D. Lake Village
Johnston, G. C. Lake Village
McDonald, Robert Eudora
McGehee, E. P., Jr. Lake Village
Marques, V. H. Lake Village
Thomas, H. W. Dermott

CLARK COUNTY

Anderson, P. R. Arkadelphia
Barnett, J. R. Arkadelphia
Bremer, J. P. Point Cedar
Bryant, R. L. Arkadelphia
Clark, Chas. G. Arkadelphia
Doane, S. N. Arkadelphia
Hill, Wm. T. Gurdon
Kennedy, Jack W. Arkadelphia
Pinkerton, R. E. Amity
Reid, Joe Winston Arkadelphia
Ross, T. T. Gurdon
Ross, W. A. Arkadelphia
Thompson, A. W. Gurdon

CLEVELAND COUNTY

Hancock, W. G. Rison
Scroggin, J. H. Benton

COLUMBIA COUNTY

Baker, J. J. Magnolia
Burt, E. G. Magnolia
Carrington, H. K. Magnolia
Cooksey, Wm. Pate Magnolia
Horn, W. H. Magnolia
Houston, Evan G. Magnolia
Jones, T. H. Waldo
Jordan, T. S. Magnolia
Kitchens, H. H. Waldo
McLeod, G. F. Magnolia
Mullins, G. E. Emerson
Ruff, Horace E. Magnolia
Ruff, John L. Magnolia
Rushton, J. F. Magnolia
Sizemore, Paul Magnolia
Souter, A. J. Waldo
Souter, T. E. McNeil
Weber, Chas. L. Magnolia
Wilson, John H. Magnolia

CONWAY COUNTY

Etheridge, C. E. Morrilton
Hardison, T. W. Morrilton
Holloway, O. R. Morrilton
Mobley, H. E. Morrilton
Mobley, Jack E. U. S. Navy
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McClendon, H. L. West Memphis
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Taylor, J. E. M. Sparkman

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Biscoe, Goree Dumas
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Fraser, N. E. Conway
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Holly Grove
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Dardanelle
Russellville

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Nowlin, W. A. Roland
 Oates, Chas. E. North Little Rock
 Oates, Gordon P. Little Rock
 Odom, Cleve Little Rock
 Oqden, M. D. Little Rock
 O'Neal, Walter H. U. S. Army
 Orr, Wm. S., Jr. Little Rock
 Padberg, F. T. Little Rock
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 Steele, Volney W. U. S. Navy
 Steinkamp, G. R. U. S. Air Force
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 Watkins, Chas. J. Little Rock
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 Watson, C. F. Little Rock
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 Weese, W. H. Little Rock
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 Little, J. E. Fort Smith
 Martin, Art B. Fort Smith
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 Waddell, Pearl B. Fort Smith
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 Clark, LeMon Fayetteville
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 Hathcock, Preston Fayetteville
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 Maquire, F. C., Jr. Augusta
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 Napper, Geo. S. McCrory
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